Access DB# 159660

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Pamela Schwartz Examiner #: 61479 Date: 7/18/05
Art Unit: 1774 Phone Number 30 21528 Serial Number: 10/701701
Mail Box and Bldg/Room Location: 10C75 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: K. Fuller	NA Sequence (#)		STN	✓
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	10	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic		Dr.Link	
Date Completed: 7/19/05	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 50	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 72	Other		Other (specify)	

PTO-1590 (8-01) 2 subsets 2 full

```
=> file reg
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*************************************************************************
*                                                                       *
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* available and contains the CA role and document type information.     *
*                                                                       *
*************************************************************************

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Experimental and calculated property data are now available. For more
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=> file hcaplus
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FILE LAST UPDATED: 18 Jul 2005  (20050718/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
```

KATHLEEN FULLER EIC 1700 REMSON 4B28 571/272-2505

```
=> d que
L18                 STR

N—Ak—OH       CH2:C
3  4  5       1  2

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS   5

STEREO ATTRIBUTES: NONE
L20                 SCR 970 AND 1700
L22          18758 SEA FILE=REGISTRY SSS FUL L18 AND L20
L31                 STR
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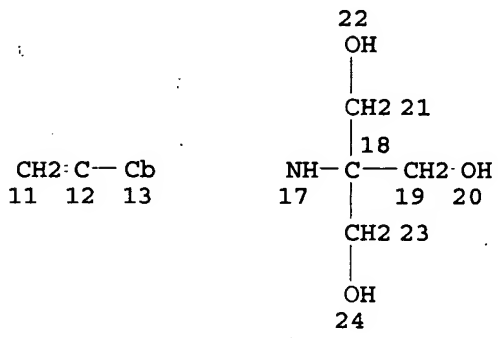
18,758 structures from the query



Subset search covering elected species

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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L34             1 SEA FILE=REGISTRY SUB=L22 SSS FUL L31
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1 structure

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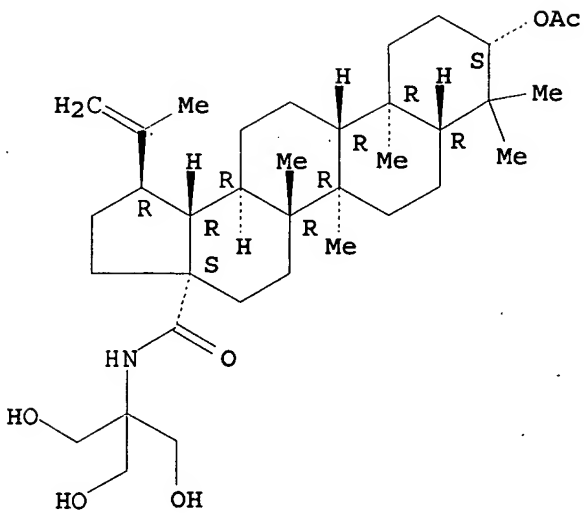
=> d scan
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L34  1 ANSWERS   REGISTRY  COPYRIGHT 2005 ACS on STN
IN   Lup-20(29)-en-28-amide, 3-(acetyloxy)-N-[2-hydroxy-1,1-
     bis(hydroxymethyl)ethyl]-, (3β)- (9CI)
MF   C36 H59 N O6

Absolute stereochemistry.
```



no good.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

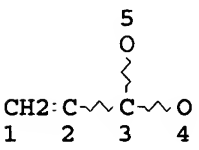
=> => d que l50
L18 STR

N--Ak—OH CH2:C
3 4 5 1 2

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L20 SCR 970 AND 1700
L22 18758 SEA FILE=REGISTRY SSS FUL L18 AND L20
L23 STR



← Subset search

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

KATHLEEN FULLER EIC 1700 REMSON 4B28 571/272-2505

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STEREO ATTRIBUTES: NONE
L25         7218 SEA FILE=REGISTRY SUB=L22 SSS FUL L23
L27         8105 SEA FILE=REGISTRY ABB=ON  L22 AND 46.150.18/RID
L35         5390 SEA FILE=HCAPLUS ABB=ON  L25
L36          138 SEA FILE=HCAPLUS ABB=ON  L35(L)(INKJET? OR INK?(2A)JET?)
L37            1 SEA FILE=HCAPLUS ABB=ON  L36 AND CHELAT?
L38         3357 SEA FILE=REGISTRY ABB=ON  L27 AND 1/NR
L39         4100 SEA FILE=REGISTRY ABB=ON  L25 NOT 1-50/NR
L40         3809 SEA FILE=HCAPLUS ABB=ON  L39
L41         1326 SEA FILE=HCAPLUS ABB=ON  L40(L)PREP/RL
L42           36 SEA FILE=HCAPLUS ABB=ON  L41(L)(INKJET? OR INK?(2A)JET?)
L44         5087 SEA FILE=HCAPLUS ABB=ON  L38
L46         1484 SEA FILE=HCAPLUS ABB=ON  L44(L)PREP/RL
L47           15 SEA FILE=HCAPLUS ABB=ON  L46(L)(INKJET? OR INK?(2A)JET?)
L49            1 SEA FILE=HCAPLUS ABB=ON  L44(L)(INKJET? OR INK?(2A)JET?) AND
                 CHELAT?
L50           49 SEA FILE=HCAPLUS ABB=ON  L37 OR L42 OR L47 OR L49
```

benzene Mtg

49 references with preparation and ink-jet

```
=> d l50 bib abs ind hitstr 1-49

L50  ANSWER 1 OF 49  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2005:340430  HCAPLUS
DN   142:420077
TI   Radiation-curable compositions with good storage stability and forming
     ink-receiving layers of ink-jet paper
IN   Ohama, Toru
PA   San Nopco Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 36 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   JP 2005104067        A2    20050421    JP 2003-343203          20031001
PRAI JP 2003-343203               20031001
AB   The compns. comprise hydrophilic monomers, hydrophilic polymers, and
     inorg. fillers and satisfy formula 1000 ≤ α + 980 +
     β ≤ 2000 [α = integral radiation amount (mJ/cm2) for
     curing of 25-μ-thick film of the compns. to pencil hardness B; β =
     ratio of the composition viscosity after 6-mo aging at 40° to the
     viscosity after 24-h aging]. The monomers may be amide CH2:CR1CONR2R3 or
     CH2:CR4NR5COR6 (R1, R4 = H, Me; R2, R3, R5, R6 = H, C1-12 organic group) and
     the polymers may be polyvinylpyrrolidone.
IC   ICM  B41M005-00
     ICS  B41J002-01
CC   74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
ST   acrylamide monomer photocurable ink receiving coating storability;
     polyvinylpyrrolidone hydroxyethylacrylamide radiation curable ink
     receiving coating; colloidal silica filler ink receptor paper coating
IT   Polyoxyalkylenes, preparation
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (acrylic, graft; storage-stable radiation-curable compns. forming
        ink-receiving layers of ink-jet paper)
IT   Fillers
        (inorg.; storage-stable radiation-curable compns. forming ink-receiving
```

layers of ink-jet paper)

IT Ink-jet recording sheets
(paper; storage-stable radiation-curable compns. forming ink-receiving layers of ink-jet paper)

IT Paper
(printing, ink-jet; storage-stable radiation-curable compns. forming ink-receiving layers of ink-jet paper)

IT 7631-86-9, Finesil X 37B, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Aerosil 200, Sylysia 470, Sylojet 703A, colloidal, fillers; storage-stable radiation-curable compns. forming ink-receiving layers of ink-jet paper)

IT 26793-34-0P, N,N-Dimethylacrylamide homopolymer 850199-53-0P, N,N-Dimethylacrylamide-2-hydroxyethyl acrylate-mono(2-acryloyloxyethyl) succinate copolymer 850199-54-1P, N,N-Diethylacrylamide-mono(2-acryloyloxyethyl) succinate copolymer **850199-55-2P**, 4-Hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-mono(2-acryloyloxyethyl) succinate copolymer 850199-56-3P, N,N-Dimethylacrylamide-N-[2-(N,N-dimethylamino)ethyl]acrylamide-2-hydroxyethyl acrylate-methoxypolyethylene glycol acrylate-mono(2-acryloyloxyethyl) succinate graft copolymer 850199-57-4P, N-Acryloylmorpholine-N,N-diethylacrylamide-4-hydroxybutyl acrylate-polyethylene glycol monoacrylate graft copolymer 850199-58-5P, N-Acryloylmorpholine-N-vinyl formamide-4-hydroxybutyl acrylate-polyethylene glycol monoacrylate-trimethylolpropane diacrylate graft copolymer 850199-59-6P, N,N-Diethylacrylamide-4-hydroxybutyl acrylate-mono(2-acryloyloxyethyl) succinate copolymer **850199-60-9P**, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-methoxypolyethylene glycol acrylate-mono(2-acryloyloxyethyl) succinate graft copolymer 850199-61-0P, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate graft copolymer 850199-62-1P, N-Acryloylmorpholine-4-hydroxybutyl acrylate-methoxypolyethylene glycol acrylate-trimethylolpropane diacrylate-mono(2-acryloyloxyethyl) succinate copolymer 850199-63-2P, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-polyethylene glycol monoacrylate graft copolymer 850199-64-3P, 2-Hydroxyethyl acrylate-polyethylene glycol monoacrylate-mono(2-acryloyloxyethyl) succinate-N-vinylformamide graft copolymer **850199-65-4P**, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-polyethylene glycol monoacrylate graft copolymer **850199-66-5P**, N,N-Diethylacrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-polyethylene glycol monoacrylate-mono(2-acryloyloxyethyl) succinate graft copolymer **850199-67-6P**, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-N-(2-hydroxyethyl)acrylamide-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate graft copolymer **850199-68-7P**, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate-trimethylolpropane diacrylate graft copolymer 850199-69-8P, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate-trimethylolpropane diacrylate graft copolymer 850199-70-1P, 4-Hydroxybutyl acrylate-mono(2-acryloyloxyethyl) succinate-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate-trimethylolpropane diacrylate graft copolymer 850199-71-2P, N-Acryloylmorpholine-N,N-diethylacrylamide-4-hydroxybutyl acrylate-oxirane graft copolymer 850199-72-3P,

N-Acryloylmorpholine-N-vinylformamide-4-hydroxybutyl acrylate-oxirane-trimethylolpropane diacrylate graft copolymer 850199-73-4P, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-methoxypolyethylene glycol acrylate-oxirane graft copolymer 850199-74-5P, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-oxirane graft copolymer 850199-75-6P, 2-Hydroxyethyl acrylate-mono(2-acryloyloxyethyl) succinate-oxirane-N-vinylformamide graft copolymer 850199-76-7P, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-oxirane graft copolymer 850199-77-8P, N,N-Diethylacrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-mono(2-acryloyloxyethyl) succinate-oxirane graft copolymer 850199-78-9P, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-N-(2-hydroxyethyl)acrylamide-methoxypolyethylene glycol acrylate-oxirane graft copolymer 850208-95-6P, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-2-hydroxyethyl acrylate-mono(2-acryloyloxyethyl) succinate-oxirane graft copolymer methyl ether 850208-97-8P, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-mono(2-acryloyloxyethyl) succinate-oxirane graft copolymer methyl ether 850208-99-0P, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-oxirane-trimethylolpropane diacrylate graft copolymer methyl ether 850209-01-7P, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-oxirane-trimethylolpropane diacrylate graft copolymer methyl ether 850209-03-9P, 4-Hydroxybutyl acrylate-mono(2-acryloyloxyethyl) succinate-oxirane-trimethylolpropane diacrylate graft copolymer methyl ether
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(storage-stable radiation-curable compns. forming ink-receiving layers of **ink-jet** paper)

IT 9002-89-5, PVA 117 9003-39-8, Luvitec K 90 25086-89-9, Luvitec VA 64 89535-55-7, CM 318 115471-08-4, Poval R 1130
RL: TEM (Technical or engineered material use); USES (Uses)
(storage-stable radiation-curable compns. forming ink-receiving layers of ink-jet paper)

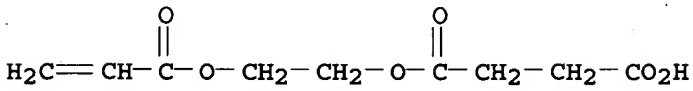
IT **850199-55-2P**, 4-Hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-mono(2-acryloyloxyethyl) succinate copolymer **850199-60-9P**, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-methoxypolyethylene glycol acrylate-mono(2-acryloyloxyethyl) succinate graft copolymer **850199-65-4P**, N,N-Diethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-polyethylene glycol monoacrylate graft copolymer **850199-66-5P**, N,N-Diethylacrylamide-4-hydroxybutyl acrylate-N-(2-hydroxyethyl)acrylamide-polyethylene glycol monoacrylate-mono(2-acryloyloxyethyl) succinate graft copolymer **850199-67-6P**, N,N-Dimethylacrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-N-(2-hydroxyethyl)acrylamide-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate graft copolymer **850199-68-7P**, N,N-Diethylacrylamide-N-(2-hydroxyethyl)acrylamide-N-[2-(N,N-Dimethylamino)ethyl]acrylamide-4-hydroxybutyl acrylate-methoxypolyethylene glycol acrylate-polyethylene glycol monoacrylate-trimethylolpropane diacrylate graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(storage-stable radiation-curable compns. forming ink-receiving layers of **ink-jet** paper)

RN 850199-55-2 HCAPLUS
CN Butanedioic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with

4-hydroxybutyl 2-propenoate and N-(2-hydroxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 50940-49-3
CMF C9 H12 O6



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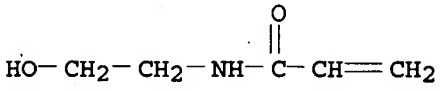
CRN 7646-67-5
CMF C5 H9 N O2



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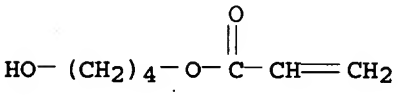
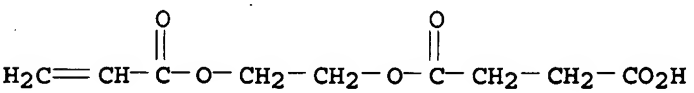
CRN 2478-10-6
CMF C7 H12 O3



RN 850199-60-9 HCAPLUS
CN Butanedioic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with N,N-diethyl-2-propenamide, N-(2-hydroxyethyl)-2-propenamide and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 50940-49-3
CMF C9 H12 O6



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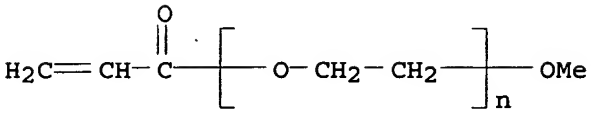
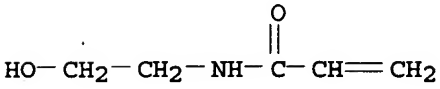
CRN 32171-39-4
CMF (C2 H4 O)n C4 H6 O2

CCI PMS



CM 3

CRN 7646-67-5
CMF C5 H9 N O2



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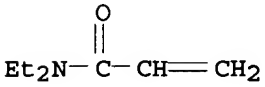
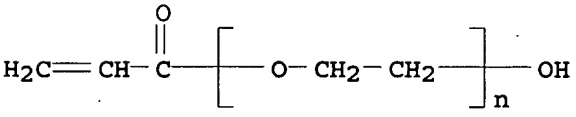
CRN 2675-94-7
CMF C7 H13 N O



RN 850199-65-4 HCAPLUS
CN 2-Propenoic acid, 4-hydroxybutyl ester, polymer with N,N-diethyl-2-propenamide, N-[2-(dimethylamino)ethyl]-2-propenamide, N-(2-hydroxyethyl)-2-propenamide and α-(1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

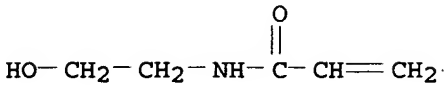
CM 1

CRN 26403-58-7
CMF (C2 H4 O)n C3 H4 O2
CCI PMS



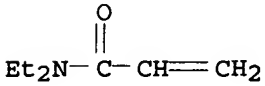
CM 2

CRN 7646-67-5
CMF C5 H9 N O2



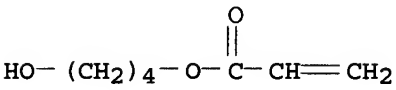
CM 3

CRN 2675-94-7
CMF C7 H13 N O



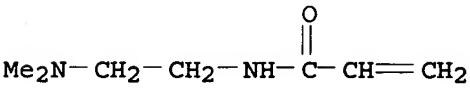
CM 4

CRN 2478-10-6
CMF C7 H12 O3



CM 5

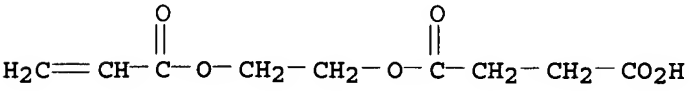
CRN 925-76-8
CMF C7 H14 N2 O



RN 850199-66-5 HCAPLUS
CN Butanedioic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with N,N-diethyl-2-propenamide, 4-hydroxybutyl 2-propenoate, N-(2-hydroxyethyl)-2-propenamide and α-(1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

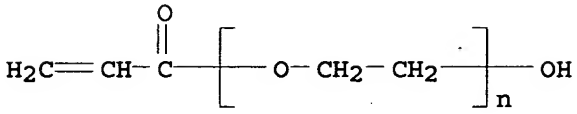
CM 1

CRN 50940-49-3
CMF C9 H12 O6



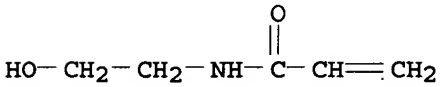
CM 2

CRN 26403-58-7
CMF (C2 H4 O)n C3 H4 O2
CCI PMS



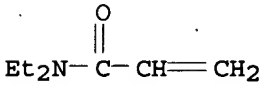
CM 3

CRN 7646-67-5
CMF C5 H9 N O2



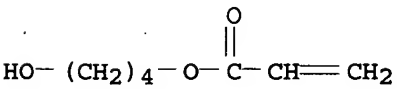
CM 4

CRN 2675-94-7
CMF C7 H13 N O



CM 5

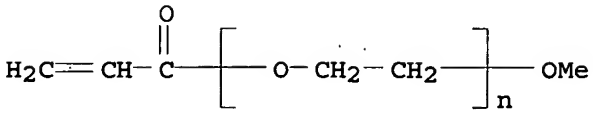
CRN 2478-10-6
CMF C7 H12 O3



RN 850199-67-6 HCAPLUS
CN 2-Propenamide, N,N-dimethyl-, polymer with N-[2-(dimethylamino)ethyl]-2-propenamide, N-(2-hydroxyethyl)-2-propenamide, α-(1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

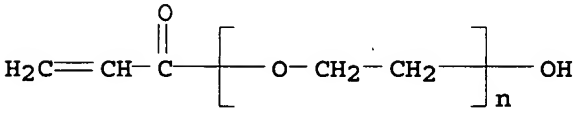
CM 1

CRN 32171-39-4
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



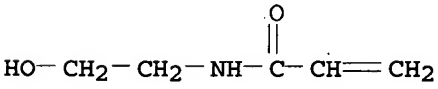
CM 2

CRN 26403-58-7
CMF (C2 H4 O)n C3 H4 O2
CCI PMS



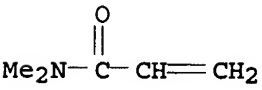
CM 3

CRN 7646-67-5
CMF C5 H9 N O2



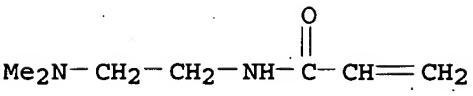
CM 4

CRN 2680-03-7
CMF C5 H9 N O



CM 5

CRN 925-76-8
CMF C7 H14 N2 O

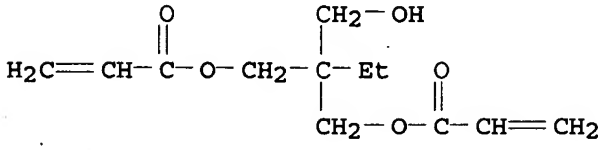


RN 850199-68-7 HCAPLUS
CN 2-Propenoic acid, 2-ethyl-2-(hydroxymethyl)-1,3-propanediyl ester, polymer

with N,N-diethyl-2-propenamide, N-[2-(dimethylamino)ethyl]-2-propenamide, 4-hydroxybutyl 2-propenoate, N-(2-hydroxyethyl)-2-propenamide, α-(1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

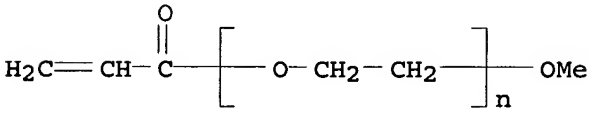
CM 1

CRN 37275-47-1
CMF C12 H18 O5



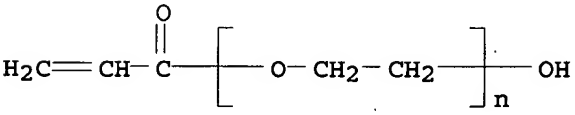
CM 2

CRN 32171-39-4
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



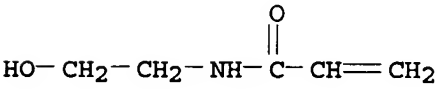
CM 3

CRN 26403-58-7
CMF (C2 H4 O)n C3 H4 O2
CCI PMS



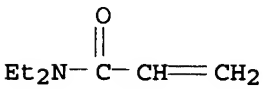
CM 4

CRN 7646-67-5
CMF C5 H9 N O2



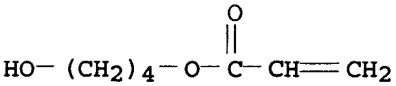
CM 5

CRN 2675-94-7
CMF C7 H13 N O



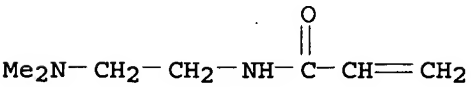
CM 6

CRN 2478-10-6
CMF C7 H12 O3



CM 7

CRN 925-76-8
CMF C7 H14 N2 O



L50 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:322573 HCAPLUS
DN 142:400594
TI Ink-jet printing paper with ink-receiving layers free from boron compound
IN Kasahara, Kenzo; Yamauchi, Masayoshi
PA Konica Minolta Holdings, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005096096	A2	20050414	JP 2003-329600	20030922
PRAI JP 2003-329600		20030922		

AB The paper comprises an opaque and water-non-absorbing support, and ≥2 porous ink-receiving layers containing inorg. particles and free from B compds., wherein the uppermost layer contains a hydrophilic polymer crosslinked by ionization radiation, and another layer excluding the uppermost layer contains a temperature-sensitive polymer having a hydrophilic-hydrophobic transition point (T) and showing hydrophilicity at a temperature below T and hydrophobicity at a temperature above T. Preferably, the temperature-sensitive polymer is prepared by polymerization in the presence of poly(vinyl

alcs.). The support is made of either a polymer-coated paper or polymer film itself. Pre. The ink-receiving layer is easy-to-form without causing crack and uneven surfaces.

IC ICM B41M005-00
ICS B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 43

ST ink jet printing sheet crosslinked hydrophilic layer; paper ink jet printing crosslinked hydrophilic layer; temp sensitive polymer layer ink jet printing sheet

IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, temperature-sensitive polymer emulsion component, in ink-receiving layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT Polyvinyl acetals
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(benzals, crosslinked, in hydrophilic layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT Ink-jet recording sheets
(ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT Ink-jet recording sheets
(paper; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT Paper
(printing, ink-jet; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT 7631-86-9, Aerosil A 300, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, temperature-sensitive polymer emulsion component, in ink-receiving layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT 9002-89-5DP, Polyvinyl alcohol, reaction products with p-(3-methacryloxy-2-hydroxypropyloxy)benzaldehyde, crosslinked 101927-31-5DP, cyclic acetals with poly(vinyl alc.), crosslinked
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in hydrophilic layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT **849799-62-8P**, Blemmer QA-butyl acrylate-diacetone acrylamide-N,N-dimethylaminopropylacrylamide methylchloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methacrylic acid-methyl methacrylate-styrene graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(temperature-sensitive binder, in ink-receiving layers; **ink-jet** printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT 85229-35-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(temperature-sensitive polymer emulsion component, in ink-receiving layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

IT 9002-89-5, PVA 117 9017-80-5 32168-43-7, Adeka Catioace DM 20A

RL: TEM (Technical or engineered material use); USES (Uses)
(temperature-sensitive polymer emulsion component, in ink-receiving layer; ink-jet printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

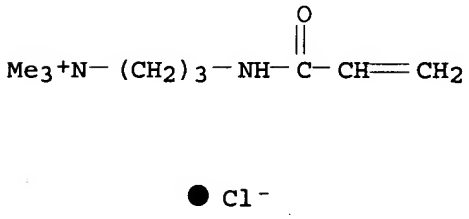
IT **849799-62-8P**, Blemmer QA-butyl acrylate-diacetone acrylamide-N,N-dimethylaminopropylacrylamide methylchloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methacrylic acid-methyl methacrylate-styrene graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(temperature-sensitive binder, in ink-receiving layers; **ink-jet** printing paper containing crosslinked hydrophilic polymer layer and temperature-sensitive polymer layer)

RN 849799-62-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

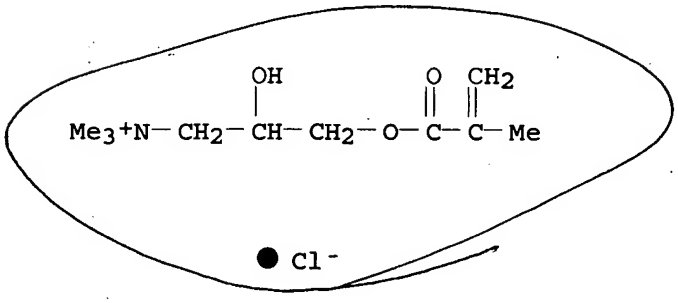
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



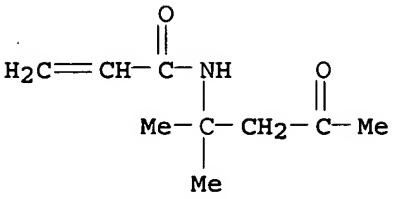
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



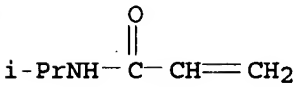
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



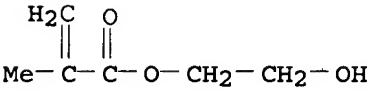
CM 4

CRN 2210-25-5
CMF C6 H11 N O



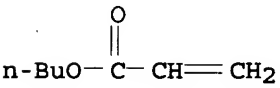
CM 5

CRN 868-77-9
CMF C6 H10 O3



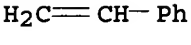
CM 6

CRN 141-32-2
CMF C7 H12 O2



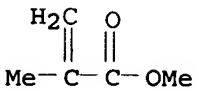
CM 7

CRN 100-42-5
CMF C8 H8



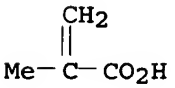
CM 8

CRN 80-62-6
CMF C5 H8 O2



CM 9

CRN 79-41-4
CMF C4 H6 O2



L50 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:122529 HCAPLUS
DN 142:200262
TI Jet-printing ink set containing nonaqueous ink and aqueous fixer fluid and method of ink-jet printing using the same
IN Bauer, Richard Douglas; Hermansky, Clarence Gaetano
PA USA
SO U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005030360	A1	20050210	US 2004-801466	20040316
	WO 2004087824	A2	20041014	WO 2004-US9184	20040325
	WO 2004087824	A3	20041125		

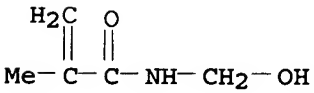
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-458483P P 20030328
AB The ink set for inkjet printing, comprises a first ink containing colorant in nonaq. vehicle; and a fixing fluid containing fixing agent in aqueous vehicle. The method for inkjet printing a substrate comprises jetting the ink set onto a substrate.
IC ICM C09D011-02
ICS B41J002-17
INCL 347095000; 347100000
CC 42-12 (Coatings, Inks, and Related Products)
ST ink set colorant nonaq vehicle jet printing; butanetetracarboxylic acid

fixer ink set
IT Coloring materials
Ink-jet printing
(jet-printing ink set containing nonaq. ink and aqueous fixer fluid and method
of ink-jet printing using the same)
IT Inks
(jet-printing; jet-printing ink set containing nonaq. ink and aqueous fixer fluid and method of ink-jet printing using the same)
IT **159208-84-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(fixing agent; **jet**-printing **ink** set containing nonaq. ink and aqueous fixer fluid and method of **ink-jet** printing using the same)
IT 79-14-1, Glycolic acid, uses 1703-58-8, 1,2,3,4-Butanetetracarboxylic acid 12626-49-2, Dowfax 2A1 187888-26-2, Bayhydrol PU 402A
RL: TEM (Technical or engineered material use); USES (Uses)
(fixing agent; jet-printing ink set containing nonaq. ink and aqueous fixer fluid and method of ink-jet printing using the same)
IT 154213-94-2, Disperbyk 161 477572-63-7, Disperbyk 2000
RL: TEM (Technical or engineered material use); USES (Uses)
(jet-printing ink set containing nonaq. ink and aqueous fixer fluid and method
of ink-jet printing using the same)
IT **159208-84-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(fixing agent; **jet**-printing **ink** set containing nonaq. ink and aqueous fixer fluid and method of **ink-jet** printing using the same)
RN 159208-84-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

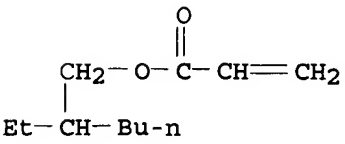
CM 1

CRN 923-02-4
CMF C5 H9 N O2



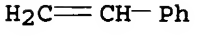
CM 2

CRN 103-11-7
CMF C11 H20 O2



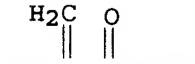
CM 3

CRN 100-42-5
CMF C8 H8



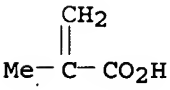
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

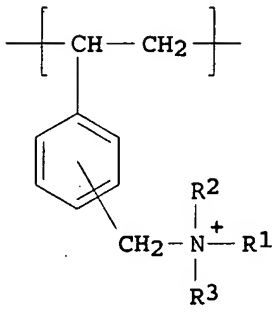
CRN 79-41-4
CMF C4 H6 O2

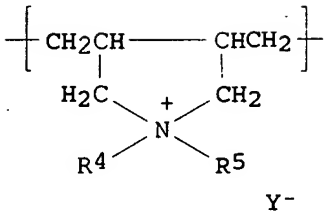


L50 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:57006 HCAPLUS
DN 142:144106
TI Ink-jet printing paper with multiple porous layers
IN Kasahara, Kenzo
PA Konica Minolta Photo Imaging Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2005014290	A2	20050120	JP 2003-179482	20030624
PRAI JP 2003-179482		20030624		

GI

Q1 = 

Q2 = 

AB The paper has ≥2 porous layers mainly containing an inorg. pigment with 3-30 nm average primary particle diameter on a water non-absorbing support. The porous layers comprise (1) ≥1 layer (except the uppermost layer) containing a polymer having hydrophilic-hydrophobic transition point (Tt) and showing hydrophilicity at <Tt and hydrophobicity at <Tt, and (2) the uppermost layer containing a poly(vinyl alc.) or its derivative and a cationic polymer containing a repeating unit Q1 (R1-3 = C1-4 alkyl; X = monovalent anion) or Q2 (R4-5 = C1-4 alkyl; Y = monovalent anion) as a main component, but free from the temperature-sensitive polymer. The paper is manufactured without generating cracks on coating and drying and show good ink absorbency and humidity resistance.

IC ICM B41M005-00
ICS B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 43

ST ink jet printing paper porous coating; hydrophilic hydrohpobic transition polymer ink receptor paper

IT Ink-jet recording sheets
(paper; ink-jet printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

IT Paper
(printing, ink-jet; ink-jet printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

IT 7631-86-9, Aerosil 300, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, porous layer containing; ink-jet printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

IT **494759-99-8P**, Blemmer QA-butyl acrylate-diacetone acrylamide-N,N-dimethylaminopropylacrylamide methyl chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(hydrophilic-hydrophobic transition polymer, porous layer containing; **ink-jet** printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

IT 143180-25-0, Poval PVA 224 177646-18-3, Kuraray Poval PVA 235
RL: TEM (Technical or engineered material use); USES (Uses)
(porous layer containing; ink-jet printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

IT 9017-80-5 26062-79-3, PAS H 10L 67907-01-1
RL: TEM (Technical or engineered material use); USES (Uses)

(uppermost porous layer containing; ink-jet printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

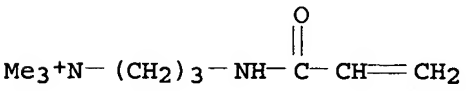
IT **494759-99-8P**, Blemmer QA-butyl acrylate-diacetone acrylamide-N,N-dimethylaminopropylacrylamide methyl chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(hydrophilic-hydrophobic transition polymer, porous layer containing; **ink-jet** printing paper with multiple porous layer containing hydrophilic-hydrophobic transition polymer)

RN 494759-99-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

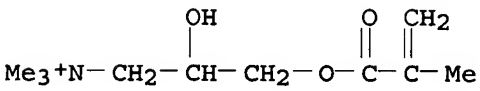
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



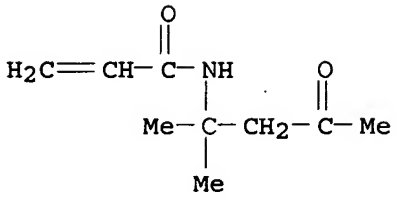
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



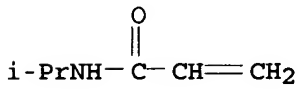
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



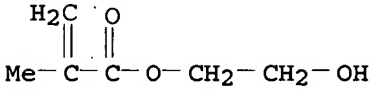
CM 4

CRN 2210-25-5
CMF C6 H11 N O



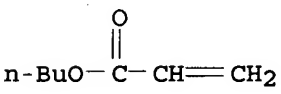
CM 5

CRN 868-77-9
CMF C6 H10 O3



CM 6

CRN 141-32-2
CMF C7 H12 O2



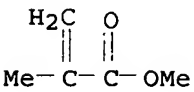
CM 7

CRN 100-42-5
CMF C8 H8

CM 8

CRN 80-62-6

CMF C5 H8 O2



L50 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:34464 HCAPLUS
DN 142:123222
TI Ink jet recording medium containing zwitterionic copolymer or Co-oligomer
IN Dungworth, Howard; Naisby, Andrew; Suhadolnik, Joseph; Yale, David A.
PA UK
SO U.S. Pat. Appl. Publ., 13 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2005008795	A1	20050113	US 2004-887197	20040708
WO 2005005155	A1	20050120	WO 2004-EP51295	20040630

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-486060P P 20030710

AB An ink jet recording media system is described which comprises at least one coating process layer that comprises a zwitterionic copolymer or Co-oligomer, of which copolymer or Co-oligomer comprises monomer units derived from at least one monomer selected from the group consisting of the zwitterionic monomers and at least one monomer selected from the group consisting of the hydroxy functional monomers and etherified hydroxy functional monomers. The media system exhibits fast dry times, excellent image quality, low levels of glycol smear, low color coalescence and excellent light fastness.

IC ICM B32B003-00
INCL 428032280
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37
ST ink jet recording zwitterionic copolymer oligomer
IT Ink-jet recording sheets
(paper; ink jet recording medium)
IT Paper
(printing, ink-jet; ink jet recording medium)
IT 519056-89-4P **658083-80-8P 823806-44-6P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink jet** recording medium)
IT **658083-80-8P 823806-44-6P**

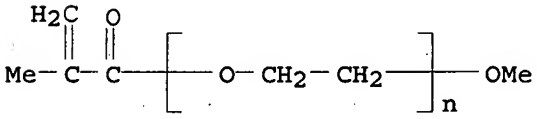
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ink jet recording medium)

RN 658083-80-8 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with N-(hydroxymethyl)-2-propenamide, α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) and 2-propenamide (9CI) (CA INDEX NAME)

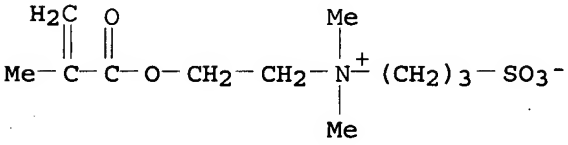
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



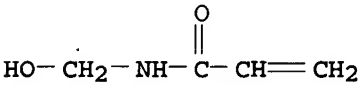
CM 2

CRN 3637-26-1
CMF C11 H21 N O5 S



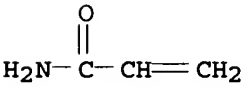
CM 3

CRN 924-42-5
CMF C4 H7 N O2



CM 4

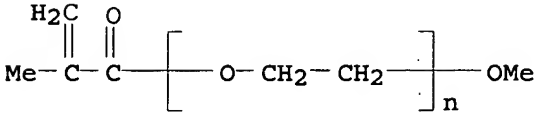
CRN 79-06-1
CMF C3 H5 N O



RN 823806-44-6 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with N-(hydroxymethyl)-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

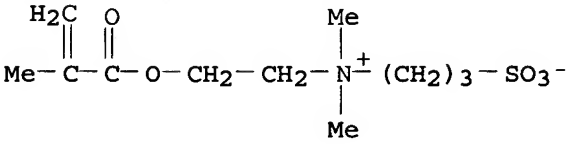
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



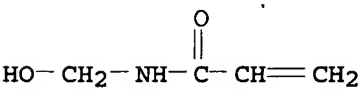
CM 2

CRN 3637-26-1
CMF C11 H21 N O5 S



CM 3

CRN 924-42-5
CMF C4 H7 N O2



L50 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:1014381 HCAPLUS
DN 142:8102
TI DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them
IN Arita, Hitoshi; Kojima, Akio
PA Ricoh Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 2004331832 A2 20041125 JP 2003-130149 20030508
PRAI JP 2003-130149 20030508
AB The inks contain ultrafine particles bearing DNA mols. on surface in water and other customary additives such as colorants, surfactants, water-soluble organic solvents, proteins, carbohydrates, etc. where the identification of printed image is done at a real time basic by NMR reading means which will compare the read information with pre-registered information. A computerized device for reading the information formed on, e.g., ID card, is also provided.
IC ICM C09D011-00
ICS B41J002-01; B41M005-00; G01N033-53
CC 42-12 (Coatings, Inks, and Related Products)
ST ink jet DNA ink anticounterfeit printing app NMR detection
IT NMR (nuclear magnetic resonance)
(detection means; manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT Inks
(jet-printing; manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT Biosensors
Identification cards
Ink-jet printers
(manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT DNA
RL: TEM (Technical or engineered material use); USES (Uses)
(manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT Counterfeiting
(prevention; manufacture of DNA-containing ink-jet inks for forming tamperproof
printed matters and printing apparatus using them)
IT Polyesters, uses
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ultrafine particles; manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT 797756-69-5P, Methacrylic acid-styrene-tridecyl methacrylate copolymer ammonium salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(core-shell ultrafine particles; manufacture of DNA-containing ink-jet inks for
forming tamperproof printed matters and printing apparatus using them)
IT 73144-93-1P, Ethylene glycol-isophthalic acid-neopentyl glycol-5-sodiosulfoisophthalic acid-terephthalic acid copolymer 188640-42-8P, Adipic acid-cyclohexanedicarboxylic acid-ethylene glycol-tricyclodecanedimethanol-trimellitic anhydride copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of DNA-containing ink-jet inks for forming tamperproof printed matters and printing apparatus using them)
IT 141954-56-5P, Acrylamide-acrylic acid-2-ethylhexyl acrylate-methyl methacrylate-styrene copolymer ammonium salt 188640-40-6P, Cyclohexanedicarboxylic acid-ethylene glycol-tricyclodecanedimethanol-trimellitic anhydride copolymer **797756-67-3P**, Butyl acrylate-itaconic acid-methyl methacrylate-N-methylolacrylamide copolymer ammonium salt 797756-68-4P, Acrylonitrile-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-itaconic acid-methyl methacrylate copolymer ammonium salt

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ultrafine particles; manufacture of DNA-containing **ink-jet inks** for forming tamperproof printed matters and printing apparatus using them)

IT **797756-67-3P**, Butyl acrylate-itaconic acid-methyl methacrylate-N-methylolacrylamide copolymer ammonium salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ultrafine particles; manufacture of DNA-containing **ink-jet inks** for forming tamperproof printed matters and printing apparatus using them)

RN 797756-67-3 HCAPLUS

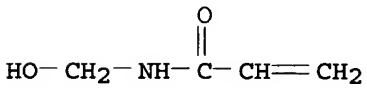
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 62066-52-8
CMF (C7 H12 O2 . C5 H8 O2 . C5 H6 O4 . C4 H7 N O2)x
CCI PMS

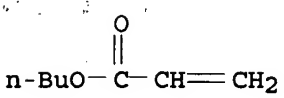
CM 2

CRN 924-42-5
CMF C4 H7 N O2



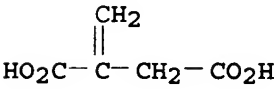
CM 3

CRN 141-32-2
CMF C7 H12 O2



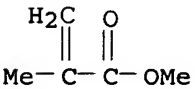
CM 4

CRN 97-65-4
CMF C5 H6 O4



CM 5

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:781861 HCAPLUS
DN 141:285852
TI Viscosity-controlled coating solution for ink-jet printing sheet
IN Funakoshi, Shinji; Takanohashi, Hiroaki
PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004262001	A2	20040924	JP 2003-52672	20030228
PRAI JP 2003-52672		20030228		

AB The solution, essentially free from gelatin, satisfies V40 = 100-500 and V15 ≥8,000 mPa·s [V40 and V15 = viscosity (mPa·s) at 40° and 15°, resp.]. The sheet is manufactured by coating the solution at ≥40° and cooled to the temperature lower than 15°. Printing sheet with ≥1 layer manufactured by the method is also claimed. The coating solution shows good film formation, ink absorption, and gives images with high d. and gloss.

IC ICM B41M005-00
ICS B05D005-04; B41J002-01
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST ink jet printing sheet coating soln viscosity
IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; viscosity-controlled coating solution for ink-jet printing sheet)
IT Ink-jet recording sheets
(viscosity-controlled coating solution for ink-jet printing sheet)
IT **494759-99-8P** 494834-83-2P **494834-86-5P**
731833-92-4P 757950-81-5P, Acrylic acid-butyl acrylate-ethylene oxide-methyl methacrylate-N-isopropylacrylamide graft copolymer nonylphenyl ether sulfate ammonium salt
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(viscosity-controlled coating solution for **ink-jet** printing sheet)
IT 7631-86-9, Aerosil A 300, uses 9002-89-5, Poly(vinyl alcohol) 177646-18-3, Poval PVA235
RL: TEM (Technical or engineered material use); USES (Uses)
(viscosity-controlled coating solution for ink-jet printing sheet)
IT **494759-99-8P 494834-86-5P 731833-92-4P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material

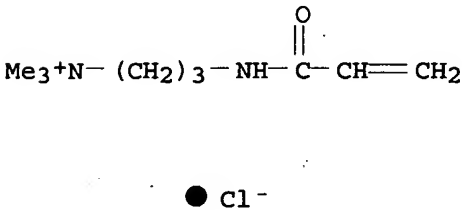
use); **PREP (Preparation)**; USES (Uses)
(viscosity-controlled coating solution for **ink-jet** printing sheet)

RN 494759-99-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

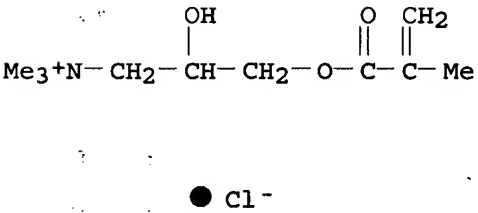
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



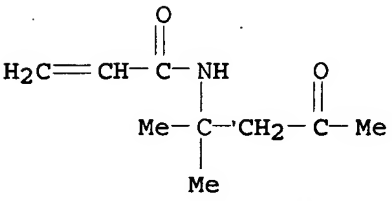
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



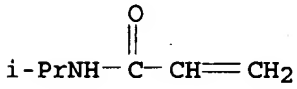
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



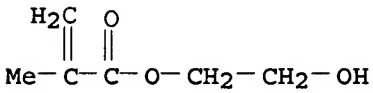
CM 4

CRN 2210-25-5
CMF C6 H11 N O



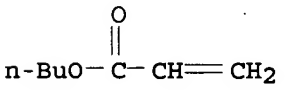
CM 5

CRN 868-77-9
CMF C6 H10 O3



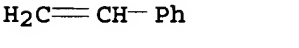
CM 6

CRN 141-32-2
CMF C7 H12 O2



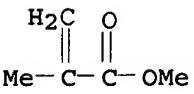
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

CRN 80-62-6
CMF C5 H8 O2

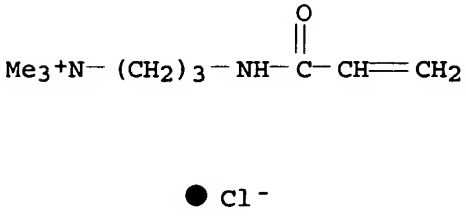


RN 494834-86-5 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-

propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

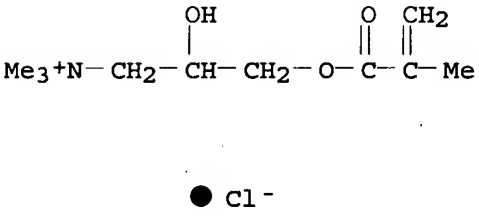
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



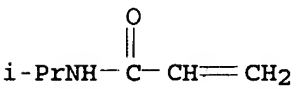
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



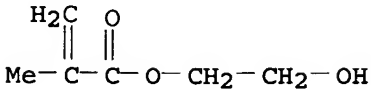
CM 3

CRN 2210-25-5
CMF C6 H11 N O



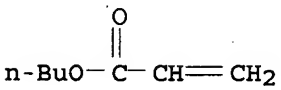
CM 4

CRN 868-77-9
CMF C6 H10 O3



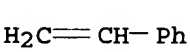
CM 5

CRN 141-32-2
CMF C7 H12 O2



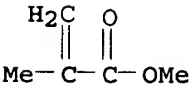
CM 6

CRN 100-42-5
CMF C8 H8



CM 7

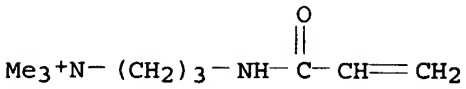
CRN 80-62-6
CMF C5 H8 O2



RN 731833-92-4 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

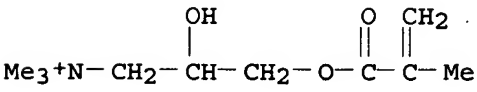
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



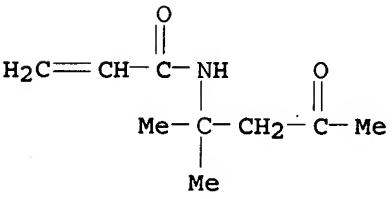
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



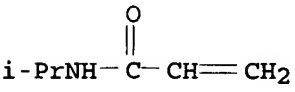
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



CM 4

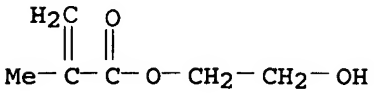
CRN 2210-25-5
CMF C6 H11 N O



CM 5

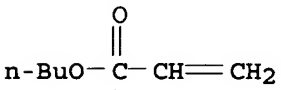
CRN 868-77-9

CMF C6 H10 O3



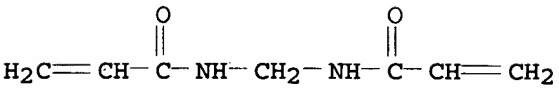
CM 6

CRN 141-32-2
CMF C7 H12 O2



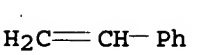
CM 7

CRN 110-26-9
CMF C7 H10 N2 O2



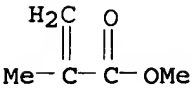
CM 8

CRN 100-42-5
CMF C8 H8



CM 9

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:778758 HCAPLUS
DN 141:268605
TI Manufacture of ink-jet printing sheet using viscosity-controlled coating
IN Funakoshi, Shinji; Takanohashi, Hiroaki

PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

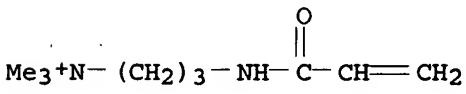
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004262000	A2	20040924	JP 2003-52671	20030228
PRAI JP 2003-52671		20030228		

AB The solution satisfies V25 = 20-300 and V10 ≥10,000 mPa·s [V25 and V10 = viscosity (mPa·s) at 25° and 10°, resp.]. The sheet is manufactured by coating the solution at ≥25° and cooled to the temperature lower than 10°. Printing sheet with ≥1 layer manufactured by the method is also claimed. The coating solution shows good film formation, ink absorption, and gives images with high d. and gloss.
IC ICM B41M005-00
ICS B05D005-04; B41J002-01
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST ink jet printing sheet coating soln viscosity
IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; manufacture of ink-jet printing sheet using viscosity-controlled coating solution)
IT Ink-jet recording sheets
(manufacture of ink-jet printing sheet using viscosity-controlled coating solution)
IT **494759-99-8P** 494834-83-2P, Acrylic acid-Adeka Reasoap SE 1025N-butyl acrylate-methyl methacrylate-N-isopropylacrylamide graft copolymer **494834-86-5P** 494835-70-0P **731833-92-4P**, Blemmer QA-butyl acrylate-diacetone acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methylenebisacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of **ink-jet** printing sheet using viscosity-controlled coating solution)
IT 7631-86-9, Aerosil A 300, uses 9002-89-5, Poly(vinyl alcohol) 177646-18-3, Poval PVA235
RL: TEM (Technical or engineered material use); USES (Uses)
(manufacture of ink-jet printing sheet using viscosity-controlled coating solution)
IT **494759-99-8P 494834-86-5P 731833-92-4P**, Blemmer QA-butyl acrylate-diacetone acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methylenebisacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of **ink-jet** printing sheet using viscosity-controlled coating solution)
RN 494759-99-8 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl

2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

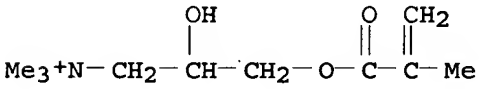
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



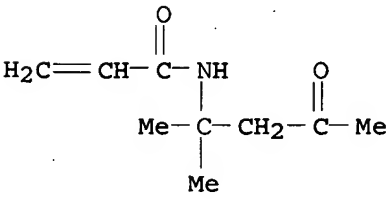
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



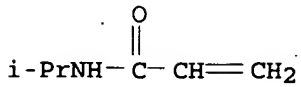
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



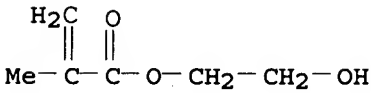
CM 4

CRN 2210-25-5
CMF C6 H11 N O



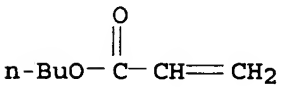
CM 5

CRN 868-77-9
CMF C6 H10 O3



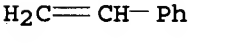
CM 6

CRN 141-32-2
CMF C7 H12 O2



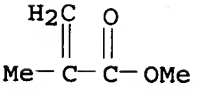
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

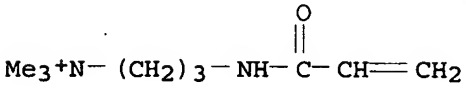
CRN 80-62-6
CMF C5 H8 O2



RN 494834-86-5 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

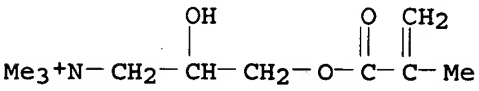
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



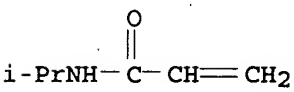
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



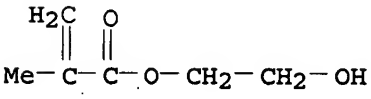
CM 3

CRN 2210-25-5
CMF C6 H11 N O



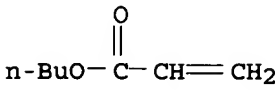
CM 4

CRN 868-77-9
CMF C6 H10 O3



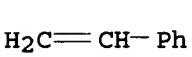
CM 5

CRN 141-32-2
CMF C7 H12 O2



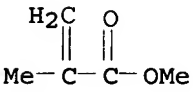
CM 6

CRN 100-42-5
CMF C8 H8



CM 7

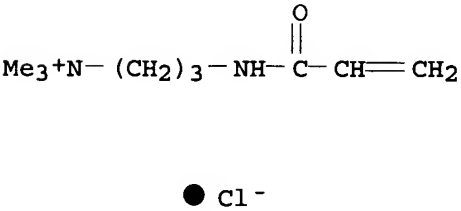
CRN 80-62-6
CMF C5 H8 O2



RN 731833-92-4 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

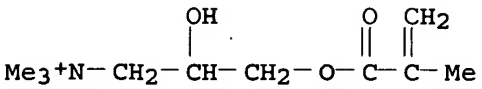
CM 1

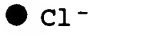
CRN 45021-77-0
CMF C9 H19 N2 O . Cl



CM 2

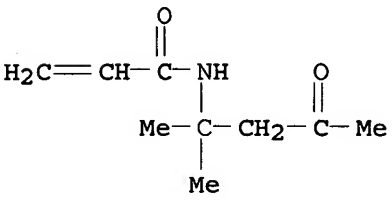
CRN 13052-11-4
CMF C10 H20 N O3 . Cl





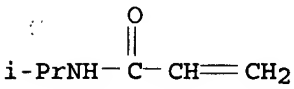
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



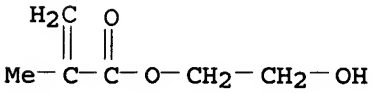
CM 4

CRN 2210-25-5
CMF C6 H11 N O



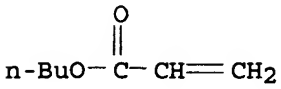
CM 5

CRN 868-77-9
CMF C6 H10 O3



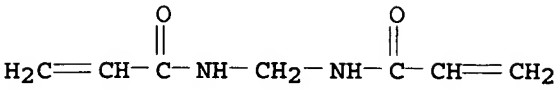
CM 6

CRN 141-32-2
CMF C7 H12 O2



CM 7

CRN 110-26-9
CMF C7 H10 N2 O2

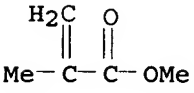


CM 8

CRN 100-42-5
CMF C8 H8

CM 9

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:778757 HCAPLUS
DN 141:268604
TI Manufacture of ink-jet printing sheet and coating solution for it
IN Funakoshi, Shinji; Takanohashi, Hiroaki
PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004261999	A2	20040924	JP 2003-52670	20030228
PRAI JP 2003-52670		20030228		

AB The solution satisfies V40 = 10-100, V15 < V40 + 20, and V5 ≥ V40 + 20 [V40, V15, V5 = viscosity (mPa·s) at 40°, 15°, and 5°, resp.]. The sheet is manufactured by coating the solution at ≥40° and cooled to the temperature lower than 10°.

Printing sheet with ≥1 layer manufactured by the method is also claimed. The coating solution shows good film formation, ink absorption, and gives images with high d. and gloss.

IC ICM B41M005-00
ICS B41J002-01; D21H019-60

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST ink jet printing sheet coating soln viscosity

IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; manufacture of ink-jet printing sheet using viscosity-controlled coating solution)

IT Ink-jet recording sheets
(manufacture of ink-jet printing sheet using viscosity-controlled coating solution)

IT **494759-99-8P** 494834-83-2P, Acrylic acid-Adeka Reasoap SE 1025N-butyl acrylate-methyl methacrylate-N-isopropylacrylamide graft copolymer **494834-86-5P**, Blemmer QA-butyl acrylate-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate-styrene copolymer 494835-70-0P **731833-92-4P**, Blemmer QA-butyl acrylate-diacetone acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methylenebisacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of **ink-jet** printing sheet using viscosity-controlled coating solution)

IT 7631-86-9, Aerosil A 300, uses 9002-89-5, Poly(vinyl alcohol) 177646-18-3, Poval PVA235
RL: TEM (Technical or engineered material use); USES (Uses)
(manufacture of ink-jet printing sheet using viscosity-controlled coating solution)

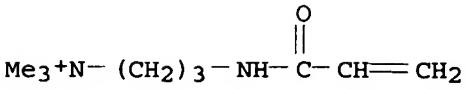
IT **494759-99-8P** **494834-86-5P**, Blemmer QA-butyl acrylate-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate-styrene copolymer **731833-92-4P**, Blemmer QA-butyl acrylate-diacetone acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methylenebisacrylamide-methyl methacrylate-styrene copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of **ink-jet** printing sheet using viscosity-controlled coating solution)

RN 494759-99-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

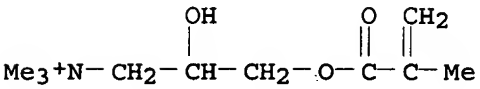
CRN 45021-77-0
CMF C9 H19 N2 O . Cl



● Cl⁻

CM 2

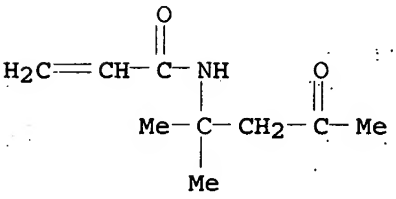
CRN 13052-11-4
CMF C10 H20 N O3 . Cl



● Cl⁻

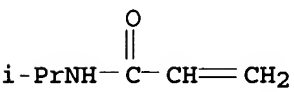
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



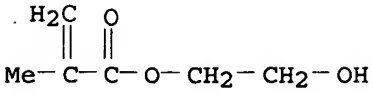
CM 4

CRN 2210-25-5
CMF C6 H11 N O



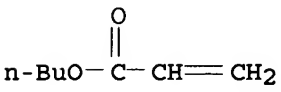
CM 5

CRN 868-77-9
CMF C6 H10 O3



CM 6

CRN 141-32-2
CMF C7 H12 O2

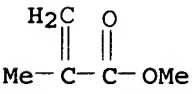


CM 7

CRN 100-42-5
CMF C8 H8

CM 8

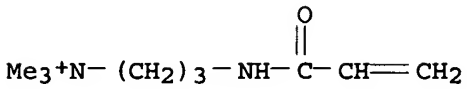
CRN 80-62-6
CMF C5 H8 O2



RN 494834-86-5 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

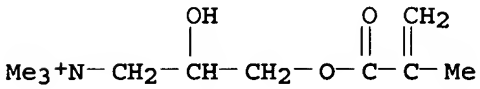
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



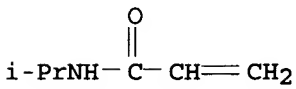
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



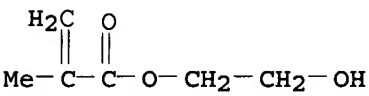
CM 3

CRN 2210-25-5
CMF C6 H11 N O



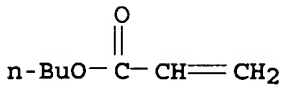
CM 4

CRN 868-77-9
CMF C6 H10 O3



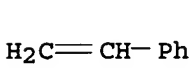
CM 5

CRN 141-32-2
CMF C7 H12 O2



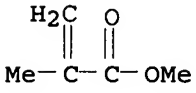
CM 6

CRN 100-42-5
CMF C8 H8



CM 7

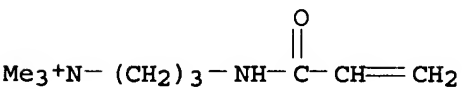
CRN 80-62-6
CMF C5 H8 O2



RN 731833-92-4 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

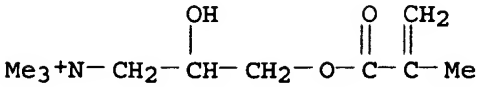
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



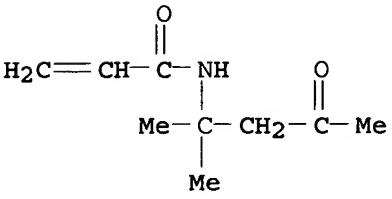
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



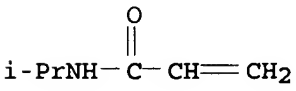
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



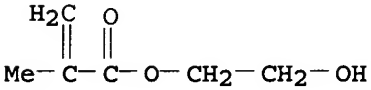
CM 4

CRN 2210-25-5
CMF C6 H11 N O



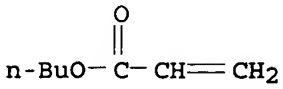
CM 5

CRN 868-77-9
CMF C6 H10 O3



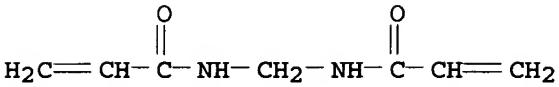
CM 6

CRN 141-32-2
CMF C7 H12 O2



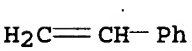
CM 7

CRN 110-26-9
CMF C7 H10 N2 O2



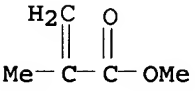
CM 8

CRN 100-42-5
CMF C8 H8



CM 9

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:631576 HCAPLUS
DN 141:164858
TI Ink jet recording material with improved ink absorbency and gloss and its manufacture
IN Funakoshi, Shinji; Hirose, Junichi
PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 40 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004216766	A2	20040805	JP 2003-8412	20030116
PRAI JP 2003-8412		20030116		

AB The material is manufactured by (1) coating a support with a solution containing
polymer emulsion containing a polymer compound showing hydrophilicity below a

defined temperature and hydrophobicity over the temperature and (2) contacting a wet coated layer with heated solid mirror surface by pressure for providing gloss on the layer surface. It has ≥1 coated layer on the support, in which the uppermost layer is manufactured by the above method.

IC ICM B41M005-00
ICS B41J002-01; C09D005-02; C09D007-12; C09D129-04; C09D157-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST ink jet printing sheet polymer emulsion

IT Ink-jet recording sheets
(ink-jet printing sheet containing polymer emulsion)

IT 31292-89-4P, Hexamethylene diisocyanate-hydrazine copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(crosslinking agent; ink-jet printing sheet containing polymer emulsion)

IT 7631-86-9P, Aerosil A 300, preparation 494759-96-5P, Adeka Reasoap SE 1025N-butyl acrylate-diacetone acrylamide-N-isopropylacrylamide-methyl methacrylate copolymer **494759-99-8P 731833-92-4P**
731833-93-5P 731833-94-6P 731833-95-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing sheet containing polymer emulsion)

IT 1760-24-3P, N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(silica treated with; ink-jet printing sheet containing polymer emulsion)

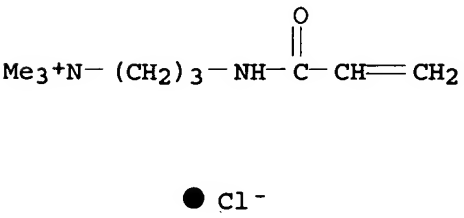
IT **494759-99-8P 731833-92-4P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing sheet containing polymer emulsion)

RN 494759-99-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

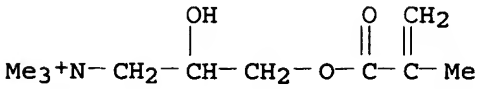
CRN 45021-77-0
CMF C9 H19 N2 O . Cl



CM 2

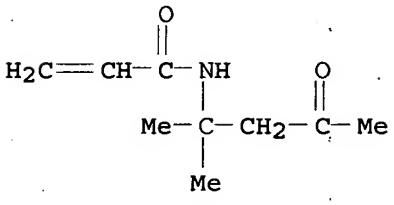
CRN 13052-11-4

CMF C10 H20 N O3 . Cl



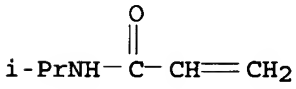
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



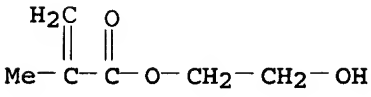
CM 4

CRN 2210-25-5
CMF C6 H11 N O



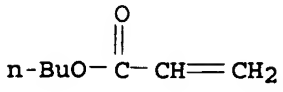
CM 5

CRN 868-77-9
CMF C6 H10 O3



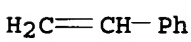
CM 6

CRN 141-32-2
CMF C7 H12 O2



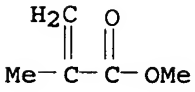
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

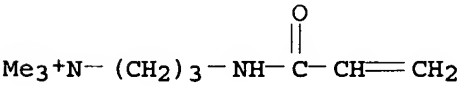
CRN 80-62-6
CMF C5 H8 O2



RN 731833-92-4 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

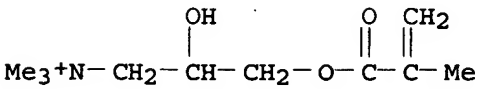
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



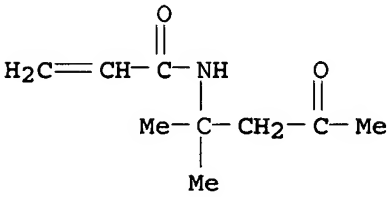
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



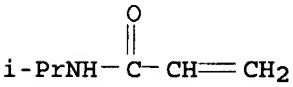
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



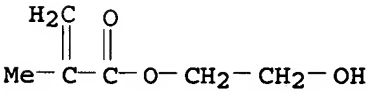
CM 4

CRN 2210-25-5
CMF C6 H11 N O



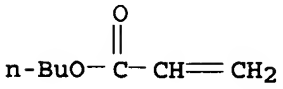
CM 5

CRN 868-77-9
CMF C6 H10 O3



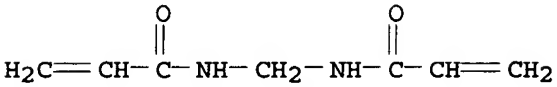
CM 6

CRN 141-32-2
CMF C7 H12 O2



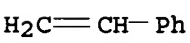
CM 7

CRN 110-26-9
CMF C7 H10 N2 O2



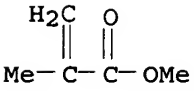
CM 8

CRN 100-42-5
CMF C8 H8



CM 9

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:605654 HCAPLUS
DN 141:148136
TI Aluminum sheets showing good ink absorption and water-resistant jet-printed products thereon
IN Saito, Hiroshi; Yamaguchi, Atsushi
PA Toyo Ink Mfg. Co., Ltd., Japan; Corona Kogyo Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004209774	A2	20040729	JP 2002-381053	20021227
PRAI JP 2002-381053		20021227		

AB The sheets have ink-receiving layers formed from coatings containing cationic compds., inorg. fillers, and emulsions prepared by aqueous emulsion polymerization of

5-80% hydrophilic ethylenic monomers containing (meth)acrylamide (derivs.) and 20-95% hydrophobic ethylenic monomers in the presence of hypophosphorous acid (salts) as chain transfer agents, surfactants, and polymerization initiators.

IC ICM B41M005-00
ICS B41J002-01; G09F007-16

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 56

ST aluminum alloy jet printing sheet waterproof image; hydrophobic methacrylate hydrophilic methylolacrylamide copolymer ink receptor; hypophosphite chain transfer agent ink receptor copolymer; dicyandiamide condensate bleeding inhibitor printing sheet

IT Ionene polymers
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(bleeding inhibitors; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT Quaternary ammonium compounds, uses
RL: NUU (Other use, unclassified); USES (Uses)
(coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides, Ethoquad C 25, cationic surfactants; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT Chain transfer agents
Ink-jet recording sheets
(ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 9016-45-9, Polyoxyethylene nonylphenyl ether
RL: NUU (Other use, unclassified); USES (Uses)
(Liponox NC 200, nonionic surfactants; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 546-93-0, Magnesium carbonate
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(TT, fillers; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 461-58-5D, Dicyandiamide, condensate 52722-38-0, Papiogene P 105
618059-50-0, Paracon PJ-O
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(bleeding inhibitors; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 25322-68-3D, Polyethylene glycol, reaction products with C8-18 alkylmethylammonium chloride
RL: NUU (Other use, unclassified); USES (Uses)
(cationic surfactants; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 6303-21-5, Hypophosphorous acid 7681-53-0, Sodium hypophosphite
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(chain transfer agents; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 7631-86-9, Finesil X 37, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(fillers; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT **65436-81-9P**, Butyl methacrylate-N-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink jet**-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT 2997-92-4, V 50
RL: CAT (Catalyst use); USES (Uses)
(polymerization initiators; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

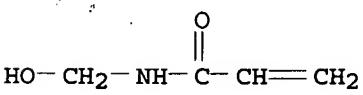
IT 58904-05-5, AA 7000 72939-77-6, AA 6000 100918-13-6, AA 2000
102523-77-3, AA 5000 113314-85-5, AA 1000
RL: TEM (Technical or engineered material use); USES (Uses)
(substrates; ink jet-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

IT **65436-81-9P**, Butyl methacrylate-N-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink jet**-printing aluminum sheets having hydrophilic-hydrophobic copolymer-containing receptor layers and forming water-resistant images)

RN 65436-81-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

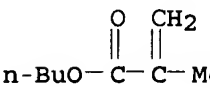
CM 1

CRN 924-42-5
CMF C4 H7 N O2



CM 2

CRN 97-88-1
CMF C8 H14 O2



L50 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:566220 HCAPLUS
DN 141:125183
TI Ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer
IN Arita, Hitoshi; Ohashi, Mikio
PA Ricoh Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 56 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004195706	A2	20040715	JP 2002-364349	20021216
PRAI	JP 2002-364349		20021216		

OS MARPAT 141:125183
AB In the ink-jet printing process, ink droplets contain self-dispersible pigments, water-soluble organic solvents, surfactants, internally 3-D crosslinked organic ultrafine particles with mean particle diameter ≥0.5 μm, and water, and deposition amount of the ink droplets is 5-40 g/m2 of print receptor. The ink-jet inks may further contain C≥6 diols or alkyl ethers and C≥8 polyols or glycol ethers. Thus, Monarch 1300 (acidic carbon black) in water was treated with NaOCl, diluted with water, mixed with NaOH to control pH, ultrafiltrated, and filtered to give a carbon black dispersion. An ink composition comprised the carbon black dispersion 8.0, 2-methyl-2,4-pentanediol 22.5, glycerol 7.5, 2-pyrrolidone 5.0, Me(CH2)12O(C2H4O)3CH2CO2H 2.0, 2-ethyl-1,3-hexanediol 2.0, an emulsion 3.0, Proxel LX 0.2, and balance water.
IC ICM B41M005-00
ICS B41J002-01; C09C001-56; C09C003-08; C09D011-00
CC 42-12 (Coatings, Inks, and Related Products)
ST ink jet printing plain paper coping; self dispersing pigment ink jet printing
IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(C6 alkylphenyl monoether, anionic surfactant; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)
IT Carbon black, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Monarch 1300, Printex 85, hydrophilic group-containing; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)
IT Surfactants
(anionic; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)
IT Glycols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ethers; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)
IT Ethers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(glycol; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)
IT Ethers, uses
Glycols, uses
Lactams
Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)

(ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT Inks
(jet-printing; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyhydric; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT Pigments, nonbiological
(self-dispersing; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT Polyesters, uses
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ultrafine particles; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT 20858-25-7D, 3,6,9,12-Tetraoxatetracosanoic acid, salts 25322-68-3D, Polyethylene glycol, C6 alkylphenyl monoether 56388-96-6D, salts 61757-59-3, ECTD 6NEX 162215-93-2D, salts 162215-94-3D, salts 162215-95-4D, salts 162215-96-5D, salts 168765-46-6D, salts 173536-75-9D, salts
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(anionic surfactant; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT 63-74-1, Sulfonamide 150-13-0 7681-52-9, Sodium hypochlorite 179912-55-1
RL: RGT (Reagent); RACT (Reactant or reagent)
(carbon black treated with; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT 56-81-5, Glycerin, uses 57-13-6, Urea, uses 57-55-6, Propylene glycol, uses 62-56-6, Thiourea, uses 77-85-0, Trimethylol ethane 77-99-6, Trimethylolpropane 80-73-9, 1,3-Dimethyl-2-imidazolidinone 94-96-2, 2-Ethyl-1,3-hexanediol 105-60-2, ε-Caprolactam, uses 106-69-4, 1,2,6-Hexanetriol 107-21-1, Ethylene glycol, uses 107-41-5, 2-Methyl-2,4-pentanediol 107-88-0, 1,3-Butanediol 110-63-4, 1,4-Butanediol, uses 111-29-5, 1,5-Pentanediol 111-46-6, Diethylene glycol, uses 111-48-8, Thiodiglycol 112-27-6, Triethylene glycol 112-60-7, Tetraethylene glycol 115-77-5, Pentaerythritol, uses 120-93-4, Ethyleneurea 144-19-4, 2,2,4-Trimethyl-1,3-pentanediol 504-63-2, 1,3-Propanediol 513-85-9, 2,3-Butanediol 616-45-5, 2-Pyrrolidone 629-11-8, 1,6-Hexanediol 872-50-4, N-Methyl-2-pyrrolidone, uses 3068-00-6, 1,2,4-Butanetriol 3445-11-2 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25322-68-3, Poly(ethylene glycol) 90724-90-6
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT 9043-30-5, Nissan Dispanol TOC
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(nonionic surfactant; ink-jet printing on plain paper, printing inks, ink cartridge, and ink-jet printer)

IT 41686-07-1P, Acrylonitrile-2-ethylhexyl acrylate-itaconic acid-methyl methacrylate copolymer 73144-93-1P, Ethylene glycol-isophthalic acid-neopentyl glycol-5-sodiosulfoisophthalic acid-terephthalic acid copolymer 88684-52-0P, Acrylamide-acrylic acid-2-ethylhexyl acrylate-methyl methacrylate-styrene copolymer 183963-51-1P, Cyclohexanedicarboxylic acid-ethylene glycol-tricyclodecanedimethanol-

trimellitic acid copolymer **186600-66-8P**, Butyl methacrylate-itaconic acid-N-methylolacrylamide-methyl methacrylate copolymer 303158-42-1P, Methacrylic acid-styrene-tridecyl methacrylate copolymer 721924-70-5P, Adipic acid-cyclohexanedicarboxylic acid-ethylene glycol-tricyclodecanedimethanol-trimellitic acid copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ultrafine particles; **ink-jet** printing on plain paper, printing inks, ink cartridge, and **ink-jet** printer)

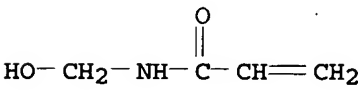
IT **186600-66-8P**, Butyl methacrylate-itaconic acid-N-methylolacrylamide-methyl methacrylate copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ultrafine particles; **ink-jet** printing on plain paper, printing inks, ink cartridge, and **ink-jet** printer)

RN 186600-66-8 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

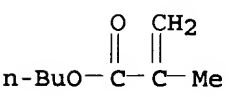
CM 1

CRN 924-42-5
CMF C4 H7 N O2



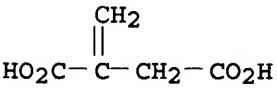
CM 2

CRN 97-88-1
CMF C8 H14 O2



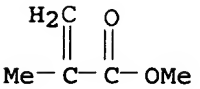
CM 3

CRN 97-65-4
CMF C5 H6 O4



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:411689 HCAPLUS
DN 140:414975
TI Polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium
IN Funakoshi, Shinji; Takanohashi, Hiroaki
PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 43 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004143301	A2	20040520	JP 2002-310142	20021024
PRAI JP 2002-310142		20021024		

AB The emulsion, for manufacture of printing medium, contains a polymer showing hydrophilicity at a temperature (a sensitive temperature) involved in a temperature range 0-30° and hydrophobicity in another temperature range higher than the sensitive temperature Preferably, the emulsion contains particles made of cores and polymer shell comprising hydrophobic monomers. The emulsion is manufactured by the process involving polymerization of monomers in the presence of core particles at a temperature higher than the sensitive temperature The emulsion, showing thickening and gelation in cooling to a temperature lower than the sensitive temperature is applied on a substrate to give an ink-jet printing receptor.

IC ICM C08L101-12
ICS B41J002-01; B41M005-00; C08F002-44; C08F261-04; C09D005-02; C09D011-00; C09D201-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
ST emulsion ink jet printing receptor sheet; core shell polymer particle emulsion coating; thickening gelation emulsion coating printing receptor; temp sensitivity hydrophobicity hydrophiliciy polymer emulsion
IT Coating materials
(emulsion; polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium)
IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers; polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium)
IT Ink-jet printing
(receptors; polymer emulsion, liquid coating of the emulsion, and ink-jet

printing receptor medium)

IT 7631-86-9, Aerosil 300, uses
RL: MOA (Modifier or additive use); USES (Uses)
(colloidal, PS-S; in polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium)

IT 10043-35-3, Boric acid, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hardener for poly(vinyl alc.); in polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium)

IT 1303-96-4, Borax 9002-89-5, Poly(vinyl alcohol)
RL: MOA (Modifier or additive use); USES (Uses)
(in polymer emulsion, liquid coating of the emulsion, and ink-jet printing receptor medium)

IT 228850-72-4P, Butyl acrylate-N-isopropylacrylamide-methyl methacrylate graft copolymer 688811-08-7P, Butyl acrylate-diacetone acrylamide-N-isopropylacrylamide-methyl methacrylate graft copolymer **688811-09-8P 688811-10-1P 688811-11-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(polymer emulsion, liquid coating of the emulsion, and **ink-jet** printing receptor medium)

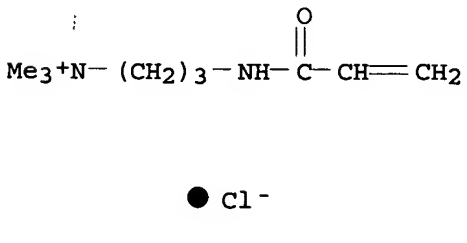
IT **688811-09-8P 688811-10-1P 688811-11-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(polymer emulsion, liquid coating of the emulsion, and **ink-jet** printing receptor medium)

RN 688811-09-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

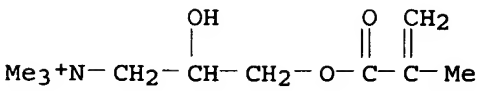
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



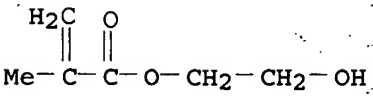
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



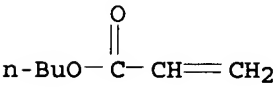
CM 3

CRN 868-77-9
CMF C6 H10 O3



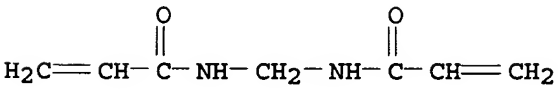
CM 4

CRN 141-32-2
CMF C7 H12 O2



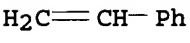
CM 5

CRN 110-26-9
CMF C7 H10 N2 O2



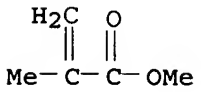
CM 6

CRN 100-42-5
CMF C8 H8



CM 7

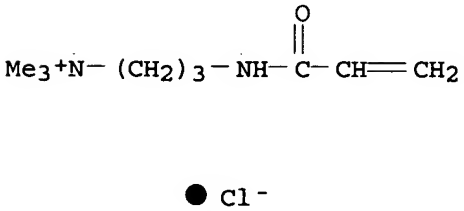
CRN 80-62-6
CMF C5 H8 O2



RN 688811-10-1 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

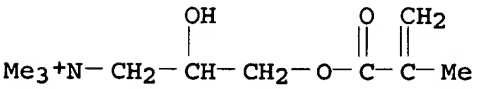
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



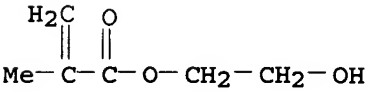
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



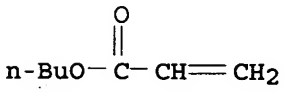
CM 3

CRN 868-77-9
CMF C6 H10 O3



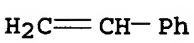
CM 4

CRN 141-32-2
CMF C7 H12 O2



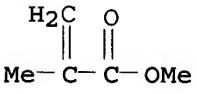
CM 5

CRN 100-42-5
CMF C8 H8



CM 6

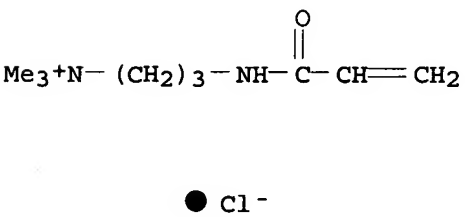
CRN 80-62-6
CMF C5 H8 O2



RN 688811-11-2 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

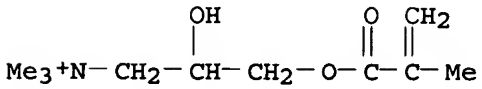
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



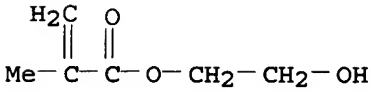
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



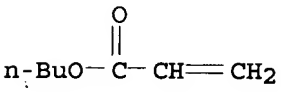
CM 3

CRN 868-77-9
CMF C6 H10 O3



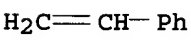
CM 4

CRN 141-32-2
CMF C7 H12 O2



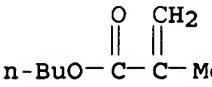
CM 5

CRN 100-42-5
CMF C8 H8



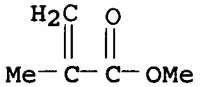
CM 6

CRN 97-88-1
CMF C8 H14 O2



CM 7

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:411471 HCAPLUS
DN 140:414973
TI Coating solution for manufacturing ink jet recording medium
IN Funakoshi, Shinji; Hirose, Junichi
PA Asahi Kasei Chemical Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004142226	A2	20040520	JP 2002-309050	20021023
PRAI JP 2002-309050		20021023		

AB The solution contains a hydrophilic binder, fine particles, an emulsion containing polymers showing hydrophilicity below decided temperature and hydrophobicity over the temperature, and a crosslinking agent. The recording medium is manufactured by coating a support with the solution at over the above temperature and cooling the coated layer to below the above temperature The medium shows improved ink absorbency, film formation, surface gloss, and transparency.
IC ICM B41M005-00
ICS B41J002-01
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST ink jet recording medium coating hydrophilic binder; particle polymer emulsion ink jet recording medium
IT Ink-jet recording sheets
(coating solution for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)
IT Ink-jet printing
(receptors; coating solution for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)
IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate sheet; coating solution for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)
IT 106392-12-5, Pluronic P 123
RL: NUU (Other use, unclassified); REM (Removal or disposal); PROC (Process); USES (Uses)
(Pluronic P 103, template, porous particle prepared with; coating solution

for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)

IT 9002-89-5, Poval PVA 203
RL: TEM (Technical or engineered material use); USES (Uses)
(binder, coating solution containing, Poval PVA 117, emulsion preparation with;
coating solution for manufacturing ink jet recording medium with improved ink
absorbency, surface gloss, and transparency)

IT 9003-20-7D, Poly(vinyl acetate), saponified 177646-18-3, Poval PVA 235
RL: TEM (Technical or engineered material use); USES (Uses)
(binder, coating solution containing; coating solution for manufacturing ink jet
recording medium with improved ink absorbency, surface gloss, and transparency)

IT 1762-95-4, Ammonium thiocyanate 5153-24-2, Zirconyl acetate 7786-30-3, Magnesium chloride, uses 9004-98-2, ,Emulgen 430
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(coating solution containing; coating solution for manufacturing ink jet recording
medium with improved ink absorbency, surface gloss, and transparency)

IT 32168-43-7, Adeka Catioace DM 20A
RL: TEM (Technical or engineered material use); USES (Uses)
(coating solution containing; coating solution for manufacturing ink jet recording
medium with improved ink absorbency, surface gloss, and transparency)

IT **690627-70-4P 690627-71-5P** 690627-72-6P 690627-74-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(core-shell, emulsion, coating solution containing; coating solution for manufacturing
ink jet recording medium with improved ink
absorbency, surface gloss, and transparency)

IT 1303-96-4, Borax 10043-35-3, Boric acid, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinker for binder, coating solution containing; coating solution for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)

IT 302-01-2DP, Hydrazine, reaction products with hexamethylene diisocyanate biuret 1071-93-8P, Adipic dihydrazide 4035-89-6DP, Hexamethylene diisocyanate biuret, reaction products with hydrazine
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinker for polymer emulsion, coating solution containing; coating solution
for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)

IT 494759-96-5P 494834-84-3P 494835-72-2P, Butyl acrylate-ethylene oxide-N-isopropylacrylamide-methyl methacrylate graft copolymer sulfate ammonium salt 690627-69-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(emulsion, coating solution containing; coating solution for manufacturing ink jet
recording medium with improved ink absorbency, surface gloss, and transparency)

IT 7631-86-9P, Silica, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(particles, coating solution containing, Aerosil A 300; coating solution for manufacturing ink jet recording medium with improved ink absorbency, surface gloss, and transparency)

IT 1302-42-7DP, Sodium aluminate, reaction products with silica
7631-86-9DP, Silica, Al-modified
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(porous particles, coating solution containing; coating solution for manufacturing ink
jet recording medium with improved ink absorbency, surface gloss, and transparency)

IT 25038-59-9, Poly(ethylene terephthalate), uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate sheet; coating solution for manufacturing ink jet recording medium
with improved ink absorbency, surface gloss, and transparency)

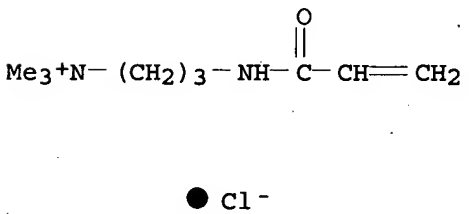
IT **690627-70-4P 690627-71-5P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(core-shell, emulsion, coating solution containing; coating solution for manufacturing
ink jet recording medium with improved ink absorbency, surface gloss, and transparency)

RN 690627-70-4 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

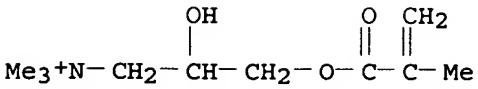
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



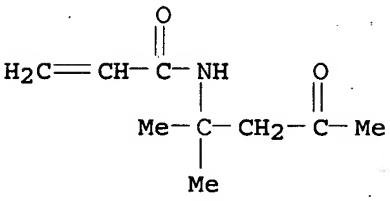
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



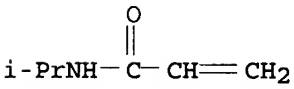
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



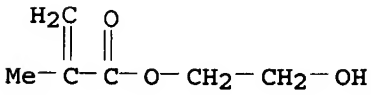
CM 4

CRN 2210-25-5
CMF C6 H11 N O



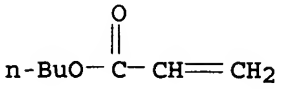
CM 5

CRN 868-77-9
CMF C6 H10 O3



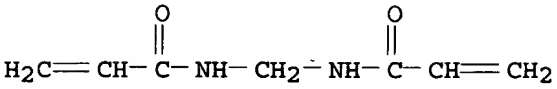
CM 6

CRN 141-32-2
CMF C7 H12 O2



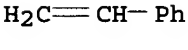
CM 7

CRN 110-26-9
CMF C7 H10 N2 O2



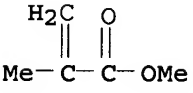
CM 8

CRN 100-42-5
CMF C8 H8



CM 9

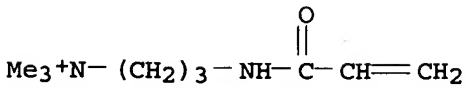
CRN 80-62-6
CMF C5 H8 O2



RN 690627-71-5 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride, graft (9CI) (CA INDEX NAME)

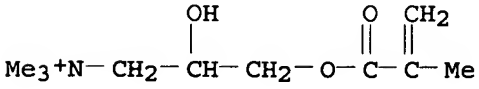
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



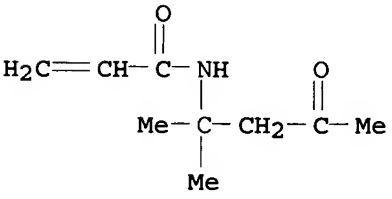
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



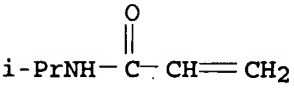
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



CM 4

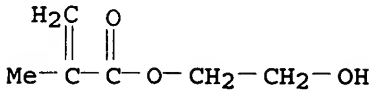
CRN 2210-25-5
CMF C6 H11 N O



CM 5

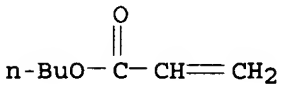
CRN 868-77-9

CMF C6 H10 O3



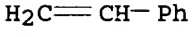
CM 6

CRN 141-32-2
CMF C7 H12 O2



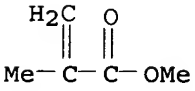
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:405657 HCAPLUS
DN 140:414961
TI Improved ink jet recording material containing a polymeric binder
IN Van Aert, Hubertus
PA Agfa-Gevaert, Belg.
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1419893	A1	20040519	EP 2002-102602	20021118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
EP 1419897	A1	20040519	EP 2003-104050	20031103

applicant

note how structures are indexed

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US	2004121094	A1	20040624	US 2003-701701	20031105
JP	2004168058	A2	20040617	JP 2003-387150	20031117
PRAI EP	2002-102602	A	20021118		
US	2002-428864P	P	20021125		

AB An improved ink jet recording material comprises a support and at least one ink receiving layer containing a water soluble or water-dispersible polymer, characterized in that said polymer comprises a repeating monomeric unit having a moiety capable of **chelating** boric acid by means of at least one nitrogen containing functional group and at least one hydroxyl group thereby forming a five- or six-membered ring.

IC ICM B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST ink jet recording sheet binder; ethyl acrylate diethanolaminomethylstyrene copolymer binder

IT Binders
Ink-jet printing
Ink-jet recording sheets
(improved ink jet recording material containing a polymeric binder)

IT Clays, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(inorg. pigment; improved ink jet recording material containing a polymeric binder)

IT Polymers, properties
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-soluble; improved ink jet recording material containing a polymeric binder)

IT 10043-35-3, Boric acid, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(hardener; improved ink jet recording material containing a polymeric binder)

IT **688803-51-2P 688803-52-3P 688803-75-0P**
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(improved **ink jet** recording material containing a polymeric binder)

IT 110-73-6 111-42-2, Diethanolamine, reactions 57458-41-0, 3(Or 4)-chloromethylstyrene
RL: RCT (Reactant); RACT (Reactant or reagent)
(improved ink jet recording material containing a polymeric binder)

IT **688803-50-1P 688803-74-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(improved **ink jet** recording material containing a polymeric binder)

IT 471-34-1, Calcium carbonate, uses 1314-23-4, Zirconia, uses 1318-23-6, Boehmite 1344-28-1, Aluminum oxide, uses 7631-86-9, Silica, uses 14762-49-3, Gibbsite 20257-20-9, Bayerite 21645-51-2, Aluminum hydroxide, uses 63957-70-0, Pseudoboehmite
RL: TEM (Technical or engineered material use); USES (Uses)
(inorg. pigment; improved ink jet recording material containing a polymeric binder)

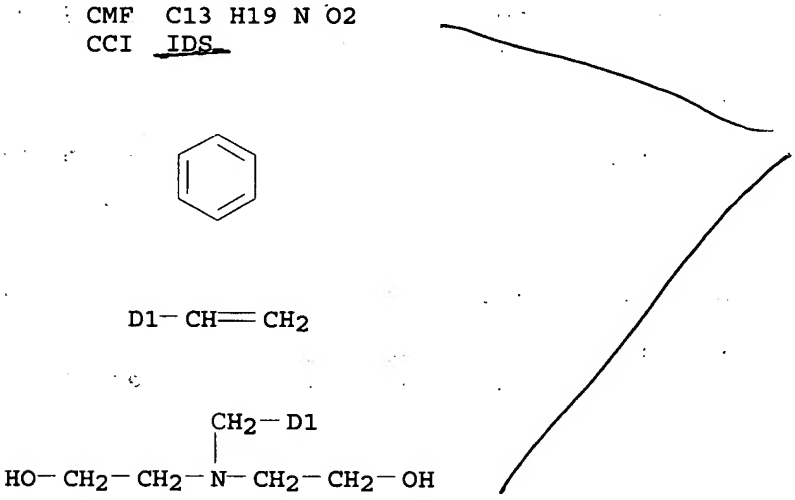
IT **688803-51-2P 688803-52-3P 688803-75-0P**
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic

preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(improved **ink jet** recording material containing a polymeric binder)

RN 688803-51-2 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with 2,2'-[[[3(or 4)-ethenylphenyl]methyl]imino]bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

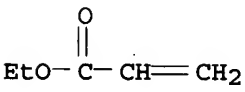
CRN 688803-50-1
CMF C13 H19 N O2
CCI IDS



structure indicated in fragments
IDS = incompletely determined substance

CM 2

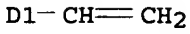
CRN 140-88-5
CMF C5 H8 O2

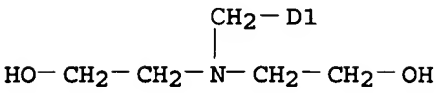


RN 688803-52-3 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2,2'-[[[3(or 4)-ethenylphenyl]methyl]imino]bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

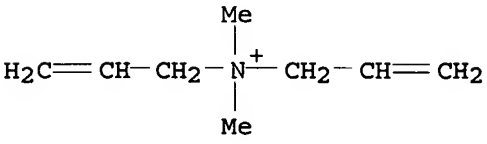
CRN 688803-50-1
CMF C13 H19 N O2
CCI IDS





CM 2

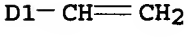
CRN 7398-69-8
CMF C8 H16 N . Cl

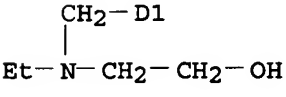


RN 688803-75-0 HCAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with 2-[[[3(or 4)-ethenylphenyl]methyl]ethylamino]ethanol (9CI) (CA INDEX NAME)

CM 1

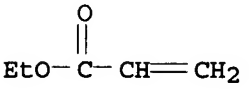
CRN 688803-74-9
CMF C13 H19 N O
CCI IDS



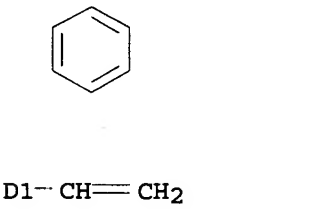


CM 2

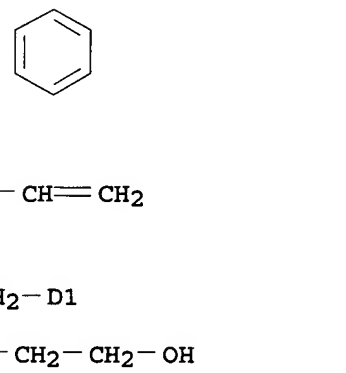
CRN 140-88-5
CMF C5 H8 O2



IT **688803-50-1P 688803-74-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(improved **ink jet** recording material containing a polymeric binder)
RN 688803-50-1 HCAPLUS
CN Ethanol, 2,2'-[[(ethenylphenyl)methyl]imino]bis- (9CI) (CA INDEX NAME)



RN 688803-74-9 HCAPLUS
CN Ethanol, 2-[[[3(or 4)-ethenylphenyl]methyl]ethylamino]- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:289740 HCAPLUS
DN 140:312164
TI Optical devices, their manufacture, and liquid crystal devices using them
IN Takao, Hideaki; Okada, Takeshi
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004109209	A2	20040408	JP 2002-268484	20020913
PRAI	JP 2002-268484		20020913		

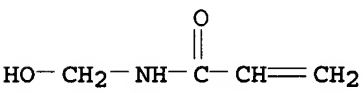
AB The devices are manufactured by (1) forming barrier rib regions of polymer compns. on supports, (2) treating the supports with plasma in a F-containing atmospheric, and (3) applying inks having droplet diameter X [μm; $S + 2\alpha < X < S + 2(L - \alpha)$; S = pixel width (μm); L = barrier rib width (μm); α = displacement of ink-dropping position (μm)] on pixel regions surrounded by the barrier ribs using an ink-jet printing method to form pixels. The optical devices may be color filters or electroluminescent devices. Flat pixels are obtained without color-mixing between adjacent pixels. The liquid crystal devices using the optical devices show good color display properties.

IC ICM G02B005-20
ICS G02B005-00; G02F001-1335; G09F009-00; G09F009-30
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73
ST optical device manuf ink jet printing; liq crystal display optical device printing; color filter manuf ink jet printing; electroluminescent device manuf ink jet printing
IT Aluminoborosilicate glasses
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(alkaline earth aluminoborosilicate, Corning 1737, substrates; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT Carbon black, processes
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(black matrixes; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT Liquid crystal displays
(color; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT Inks
(jet-printing, droplet diameter-controlled; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT Electroluminescent devices
Glass substrates
Ink-jet printing
Optical filters
(manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT Plasma
(treatment of supports with; manufacture of optical devices by ink-jet

printing for liquid crystal displays)
IT 192140-79-7, V 259BK 412916-90-6, CT 2000L 493016-80-1, Color Mosaic CK-S 171X
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(black matrixes; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT 80-62-6, Methyl methacrylate 868-77-9 924-42-5, N-Methylolacrylamide
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(inks, droplet diameter-controlled; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT **160109-42-2P**, 2-Hydroxyethyl methacrylate-methyl methacrylate-N-methylolacrylamide copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(pixels; manufacture of optical devices by **ink-jet** printing for liquid crystal displays)
IT 75-46-7, Trifluoromethane 76-16-4, Perfluoroethane 76-19-7, Perfluoropropane 378-22-3 2551-62-4, Sulfur fluoride 7782-44-7, Oxygen, uses 51311-17-2, Carbon fluoride
RL: NUU (Other use, unclassified); USES (Uses)
(plasma treatment of supports in; manufacture of optical devices by ink-jet printing for liquid crystal displays)
IT **160109-42-2P**, 2-Hydroxyethyl methacrylate-methyl methacrylate-N-methylolacrylamide copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(pixels; manufacture of optical devices by **ink-jet** printing for liquid crystal displays)
RN 160109-42-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

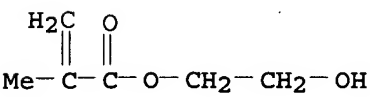
CM 1

CRN 924-42-5
CMF C4 H7 N O2



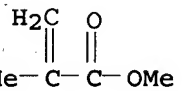
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:988520 HCAPLUS
DN 140:28391
TI Polymer nanoparticle-based binder compositions for ink-jet inks
IN Fu, Zhenwen; Graziano, Louis Christopher; Lein, George Max; Hallden-Abberton, Michael Paul; Lundquist, Eric Gustave; Devonport, Wayne
PA Rohm and Haas Company, USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 16

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1371697	A2	20031217	EP 2003-253676	20030611
EP 1371697	A3	20040102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003232916	A1	20031218	US 2003-461948	20030613
US 2004063809	A1	20040401	US 2003-462110	20030613
CN 1487042	A	20040407	CN 2003-154511	20030613
BR 2003002071	A	20040817	BR 2003-2071	20030613
JP 2004250659	A2	20040909	JP 2003-168704	20030613
PRAI US 2002-389043P	P	20020614		
US 2002-414599P	P	20020930		
US 2002-414600P	P	20020930		

AB A binder composition comprises polymeric nanoparticles (PNPs) having a mean diameter from 1 to 50 nm, the PNPs comprising as polymerized units 1-20% (based on dry polymer weight) of a curable composition unreactive at ambient conditions but capable of being initiated thermally, chemical or photochem. The binder is used in ink-jet ink compns. to improve durability of inks printed on paper, plastics, leather and textiles. Thus, Bu acrylate (169), Me methacrylate (169), trimethylolpropane triacrylate (45), methacrylic acid (23), and itaconic acid (45 g) were polymerized and neutralized with ammonium hydroxide to give a copolymer nanoparticle dispersion useful as a binder for ink-jet inks.
IC ICM C09D011-00
ICS C08J003-07; C08F002-06; C08J003-26
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 40, 42
ST acrylic polymer nanoparticle curable binder jet ink compn
IT Polyurethanes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(acrylates, crosslinking agents; preparation of polymer nanoparticle binders for ink-jet inks)

IT Amines, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkoxylated, tertiary, crosslinking agents; preparation of polymer nanoparticle binders for ink-jet inks)
IT Polyoxyalkylenes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(amino-terminated, crosslinking agents; preparation of polymer nanoparticle binders for ink-jet inks)
IT Polyamide fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(aramid, substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Textiles
(cotton, substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Acrylic fibers, uses
Polyamide fibers, uses
Polyester fibers, uses
Rayon, uses
Vinal fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(fabrics, substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Textile printing
(ink-jet inks containing polymer nanoparticle binders for)
IT Inks
(jet-printing; preparation of polymer nanoparticle binders for ink-jet inks)
IT Disperse systems
(of nanoparticles; preparation of polymer nanoparticle binders for ink-jet inks)
IT Binders
Coloring materials
Crosslinking
Crosslinking agents
Nanoparticles
Pigments, nonbiological
(preparation of polymer nanoparticle binders for ink-jet inks)
IT Textiles
(silk, substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Leather
Nonwoven fabrics
Paper
Textiles
(substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Glass fiber fabrics
Plastics, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT Textiles
(wool, substrates; preparation of polymer nanoparticle binders for ink-jet inks)
IT 56-81-5, Glycerol, reactions 919-30-2, 3-Triethoxysilylpropylamine
13822-56-5, 3-Trimethoxysilylpropylamine 64852-22-8, Jeffamine T 3000
178153-95-2, CN 981 200139-08-8, Desmodur XP 7063 212626-19-2, Epocros
K 2020E 304466-12-4, Ethox SAM 50 634178-88-4, Ucarlink RTM-XL 20
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking agent; preparation of polymer nanoparticle binders for ink-jet inks)
IT 75-13-8D, Isocyanic acid, esters, polymers 30969-75-6D, Oxazoline,

polymers
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking agents; preparation of polymer nanoparticle binders for ink-jet inks)

IT 401810-22-8, Acryjet Cyan 157
RL: TEM (Technical or engineered material use); USES (Uses)
(pigment; preparation of polymer nanoparticle binders for ink-jet inks)

IT 136844-56-9P, Butyl acrylate-methacrylic acid-methyl methacrylate-trimethylolpropane triacrylate copolymer 633357-53-6P
633357-55-8P 633357-57-0P 633357-59-2P 633357-61-6P
633357-63-8P 633357-65-0P 633357-67-2P 633357-69-4P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of polymer nanoparticle binders for **ink-jet inks**)

IT **633357-55-8P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of polymer nanoparticle binders for **ink-jet inks**)

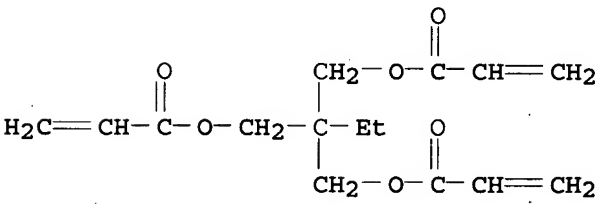
RN 633357-55-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-54-7
CMF (C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C4 H7 N O2 . C4 H6 O2)x
CCI PMS

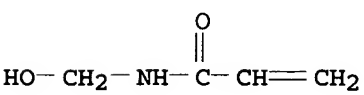
CM 2

CRN 15625-89-5
CMF C15 H20 O6



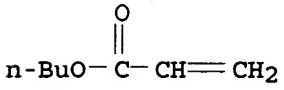
CM 3

CRN 924-42-5
CMF C4 H7 N O2



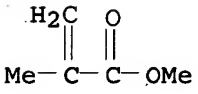
CM 4

CRN 141-32-2
CMF C7 H12 O2



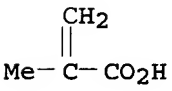
CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 79-41-4
CMF C4 H6 O2



L50 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:906141 HCAPLUS
DN 139:382888
TI Active energy-curable ink-jet ink compositions and printing method therewith
IN Sasa, Nobumasa
PA Konica Minolta Holdings Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003327873	A2	20031119	JP 2002-131384	20020507
PRAI JP 2002-131384		20020507		

AB Title inks, having straight projecting ability without sub-drop occurrence, contain amino group-containing polyfunctional (meth)acrylates. A PET film was printed with an ink containing a pigment, tris(2-methacryloyloxyethyl)amine, Irgacure 369, ethoxylated trimethylolpropane triacrylate to result ink drop straight forward distance of <±15 μm

with no sub-drops and UV-cured at 30 mJ/cm2 to form images showing good fixing ability.

IC ICM C09D011-00
ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

ST plastic film adhesion UV curable printing ink amino polymethacrylate

IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; amino polyfunctional (meth)acrylate-containing UV-curable ink-jet inks with sub-drop prevention and straight projecting ability)

IT Plastic films
(film, substrate; amino polyfunctional (meth)acrylate-containing UV-curable ink-jet inks with sub-drop prevention and straight projecting ability)

IT Polyesters, miscellaneous
Polyolefins
RL: MSC (Miscellaneous)
(film, substrate; amino polyfunctional (meth)acrylate-containing UV-curable ink-jet inks with sub-drop prevention and straight projecting ability)

IT Inks
(jet-printing; amino polyfunctional (meth)acrylate-containing UV-curable ink-jet inks with sub-drop prevention and straight projecting ability)

IT 623900-61-8P, Polyethylene glycol trimethylolpropane ether triacrylate-tris(2-methacryloyloxyethyl)amine copolymer
623900-62-9P, Bis(2-hydroxy-3-methacryloyloxypropyl)amine-polyethylene glycol trimethylolpropane ether triacrylate copolymer
623900-63-0P, Polyethylene glycol trimethylolpropane ether triacrylate-tris(2-hydroxy-3-methacryloyloxypropyl)amine copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(amino polyfunctional (meth)acrylate-containing UV-curable **ink-jet inks** with sub-drop prevention and straight projecting ability)

IT 9003-07-0, Polypropylene 9003-53-6, Polystyrene 25038-59-9, PET polymer, miscellaneous
RL: MSC (Miscellaneous)
(film, substrate; amino polyfunctional (meth)acrylate-containing UV-curable ink-jet inks with sub-drop prevention and straight projecting ability)

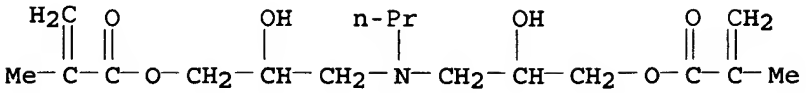
IT **623900-62-9P**, Bis(2-hydroxy-3-methacryloyloxypropyl)amine-polyethylene glycol trimethylolpropane ether triacrylate copolymer
623900-63-0P, Polyethylene glycol trimethylolpropane ether triacrylate-tris(2-hydroxy-3-methacryloyloxypropyl)amine copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(amino polyfunctional (meth)acrylate-containing UV-curable **ink-jet inks** with sub-drop prevention and straight projecting ability)

RN 623900-62-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (propylimino)bis(2-hydroxy-3,1-propanediyl) ester, polymer with α-hydro-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

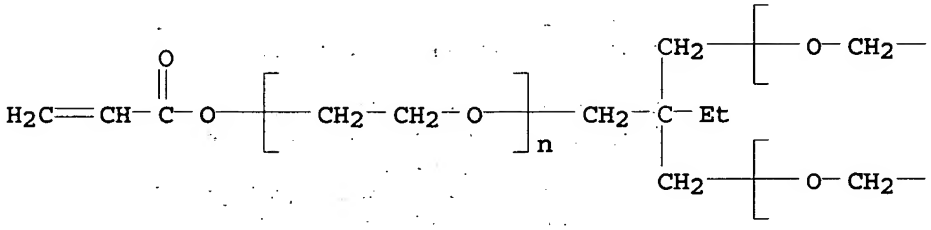
CRN 191326-35-9
CMF C17 H29 N O6



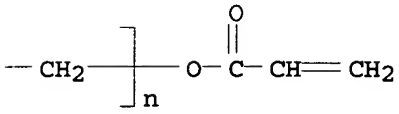
CM 2

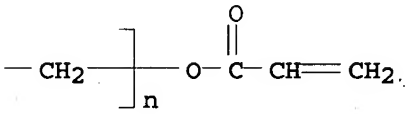
CRN 28961-43-5
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6
CCI PMS

PAGE 1-A



PAGE 1-B

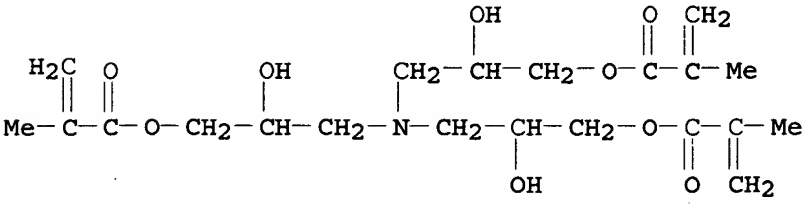




RN 623900-63-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, nitrilotris(2-hydroxy-3,1-propanediyl) ester, polymer with α-hydro-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

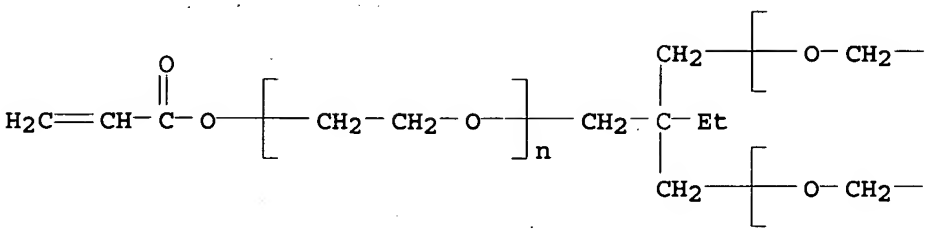
CRN 302577-66-8
CMF C21 H33 N O9



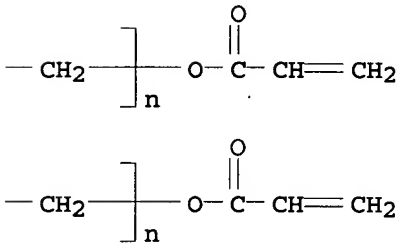
CM 2

CRN 28961-43-5
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6
CCI PMS

PAGE 1-A



PAGE 1-B



L50 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:841045 HCAPLUS
DN 139:356061
TI Ink receiving layer composition for ink jet recording sheet
IN Saito, Hiroshi; Midorikawa, Toshifumi
PA Toyo Ink Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003305948	A2	20031028	JP 2002-111566	20020415
PRAI JP 2002-111566		20020415		

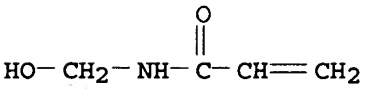
AB The composition contains (1) a methacrylamide copolymer emulsion obtained by emulsion-polymerizing a monomer mixture of (a) 5-80 weight% hydrophilic ethylenically unsatd. monomer containing a methacrylamide and/or its derivative and (b) 20-95 weight% a hydrophobic ethylenically unsatd. monomer using a surfactant and a polymerization initiator in the presence of a hypophosphorous acid or its salt of a chain transfer agent in aqueous medium, (2) a cationic compound, and (3) an inorg. filler. The sheet with the layer comprising the composition, is also claimed. The sheet shows improved drying properties, ink absorbency, anti-feathering, and water resistance.

IC ICM B41M005-00
ICS B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37
ST ink jet printing sheet coating layer; emulsion polymn chain transfer agent surfactant
IT Surfactants
(cationic; coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT Chain transfer agents
Ink-jet recording sheets
(coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT Quaternary ammonium compounds, uses
RL: NUU (Other use, unclassified); USES (Uses)
(coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides, Ethoquad C 25, surfactant; coating composition containing acrylamide copolymer emulsion for
ink-jet printing sheet)
IT Polymerization
(emulsion; coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT Surfactants
(nonionic; coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers; coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT 7681-53-0, Sodium hypophosphite
RL: CAT (Catalyst use); USES (Uses)
(chain transfer agent; coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT **65436-81-9P**, Butyl methacrylate-N-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(coating composition containing acrylamide copolymer emulsion for **ink-jet** printing sheet)
IT 461-58-5D, Dicyandiamide, derivs. 7631-86-9, Finesil X 45, uses
52722-38-0, Papiogene P 105 618059-50-0, Paracon PJ-O
RL: TEM (Technical or engineered material use); USES (Uses)
(coating composition containing acrylamide copolymer emulsion for ink-jet printing sheet)
IT 2997-92-4, V 50
RL: CAT (Catalyst use); USES (Uses)
(polymerization initiator; coating composition containing acrylamide copolymer emulsion
for ink-jet printing sheet)
IT 9016-45-9, Liponox NC 200
RL: NUU (Other use, unclassified); USES (Uses)
(surfactant; coating composition containing acrylamide copolymer emulsion for
ink-jet printing sheet)
IT **65436-81-9P**, Butyl methacrylate-N-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(coating composition containing acrylamide copolymer emulsion for **ink-jet** printing sheet)
RN 65436-81-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

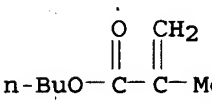
CM 1

CRN 924-42-5
CMF C4 H7 N O2



CM 2

CRN 97-88-1
CMF C8 H14 O2



L50 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:734645 HCAPLUS
DN 139:247030
TI Non-pigmented ink jet inks containing hollow polymer microspheres
IN Chung, Chao-Jen; Finley, Maureen Joanne; Fu, Zhenwen; Sheasley, William David
PA Rohm and Haas Company, USA
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1344804	A1	20030917	EP 2003-251273	20030304
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2003176534	A1	20030918	US 2003-375775	20030227
CN 1443816	A	20030924	CN 2003-120021	20030311
JP 2003313481	A2	20031106	JP 2003-64924	20030311
PRAI US 2002-363421P	P	20020312		

AB A non-pigmented ink composition suitable for ink jet printing is made up of a blend of two or more hollow micro-spheres comprising a small particle size hollow micro-sphere and a larger particle size hollow micro-sphere. The remainder of the ink composition comprises a suitable carrier vehicle, which typically contains water, alcs., surfactants, humectants and optionally a resin component.

IC ICM C09D011-00
ICS D06P005-00
CC 42-12 (Coatings, Inks, and Related Products)
ST inkjet ink polymer hollow microsphere
IT Inks
(jet-printing; non-pigmented ink jet inks containing hollow polymer microspheres)
IT Balloons

Microspheres
(microballoons, polymer; non-pigmented ink jet inks containing hollow polymer microspheres)

IT **65582-09-4P**, Acrylamide-acrylonitrile-butyl acrylate-ethyl acrylate-itaconic acid-n-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(binder; non-pigmented **ink jet inks** containing hollow polymer microspheres)

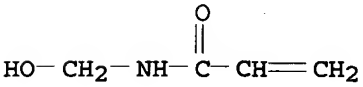
IT **65582-09-4P**, Acrylamide-acrylonitrile-butyl acrylate-ethyl acrylate-itaconic acid-n-methylolacrylamide copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(binder; non-pigmented **ink jet inks** containing hollow polymer microspheres)

RN 65582-09-4 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

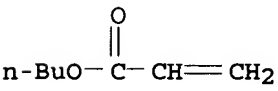
CM 1

CRN 924-42-5
CMF C4 H7 N O2



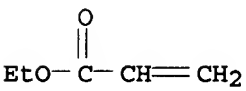
CM 2

CRN 141-32-2
CMF C7 H12 O2



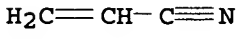
CM 3

CRN 140-88-5
CMF C5 H8 O2



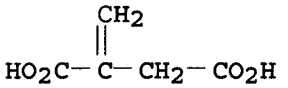
CM 4

CRN 107-13-1
CMF C3 H3 N



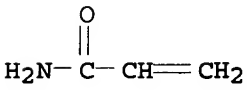
CM 5

CRN 97-65-4
CMF C5 H6 O4



CM 6

CRN 79-06-1
CMF C3 H5 N O



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:609530 HCAPLUS
DN 139:151239
TI Ink-jet ink binder composition
IN Chung, Chao-jen; Finley, Maureen Joanne; Fu, Zhenwen
PA Rohm and Haas Company, USA
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1333071	A2	20030806	EP 2003-250327	20030118
	EP 1333071	A3	20031119		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	TW 593577	B	20040621	TW 2003-92101354	20030122
	US 2003176532	A1	20030918	US 2003-349896	20030123
	CN 1435456	A	20030813	CN 2003-103510	20030128
	JP 2003261810	A2	20030919	JP 2003-20044	20030129
PRAI	US 2002-353094P	P	20020130		

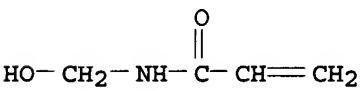
AB An inkjet ink binder composition includes an emulsion polymer, the polymer including as polymerized units 1-10% of a monomer selected from the group consisting of methylolacrylamide, methylolmethacrylamide, Me acrylamidoglycolate Me ether, acrylamidoglycolic acid, and mixts. thereof. An inkjet ink composition including the emulsion polymer, a liquid medium, and a

pigment and a method for improving the durability of inkjet ink printed on a substrate are also provided. A binder polymer was prepared from acrylamide, acrylonitrile, Bu acrylate, Et acrylate, itaconic acid, and N-methylolacrylamide.

IC ICM C09D011-00
CC 42-12 (Coatings, Inks, and Related Products)
ST ink jet binder methylolacrylamide polymer
IT Binders
(ink-jet ink binder composition)
IT Inks
(jet-printing; ink-jet ink binder composition)
IT **65379-28-4P 65582-09-4P 67785-46-0P,** Acrylonitrile-Butyl acrylate-Ethyl acrylate-itaconic acid-N-methylolacrylamide copolymer **571202-21-6P 571202-22-7P 571202-23-8P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet ink** binder composition)
IT **65379-28-4P 65582-09-4P 67785-46-0P,** Acrylonitrile-Butyl acrylate-Ethyl acrylate-itaconic acid-N-methylolacrylamide copolymer **571202-21-6P 571202-22-7P 571202-23-8P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet ink** binder composition)
RN 65379-28-4 HCAPLUS
CN Butanedioic acid, methylene-, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

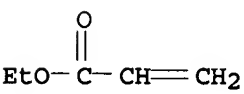
CM 1

CRN 924-42-5
CMF C4 H7 N O2



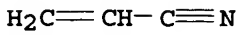
CM 2

CRN 140-88-5
CMF C5 H8 O2



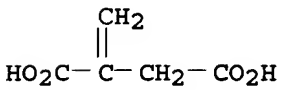
CM 3

CRN 107-13-1
CMF C3 H3 N



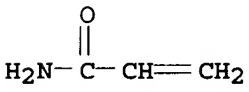
CM 4

CRN 97-65-4
CMF C5 H6 O4



CM 5

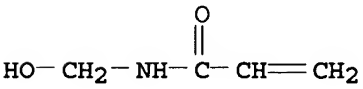
CRN 79-06-1
CMF C3 H5 N O



RN 65582-09-4 HCAPLUS
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

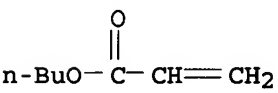
CM 1

CRN 924-42-5
CMF C4 H7 N O2



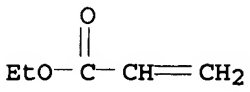
CM 2

CRN 141-32-2
CMF C7 H12 O2



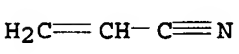
CM 3

CRN 140-88-5
CMF C5 H8 O2



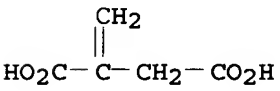
CM 4

CRN 107-13-1
CMF C3 H3 N



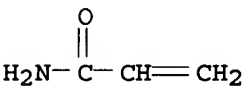
CM 5

CRN 97-65-4
CMF C5 H6 O4



CM 6

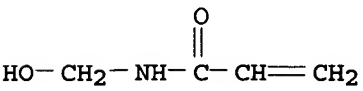
CRN 79-06-1
CMF C3 H5 N O



RN 67785-46-0 HCAPLUS
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

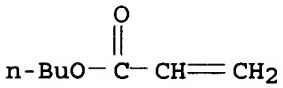
CM 1

CRN 924-42-5
CMF C4 H7 N O2



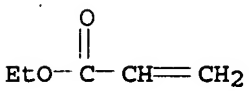
CM 2

CRN 141-32-2
CMF C7 H12 O2



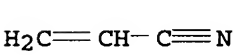
CM 3

CRN 140-88-5
CMF C5 H8 O2



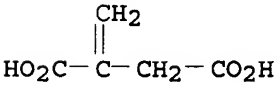
CM 4

CRN 107-13-1
CMF C3 H3 N



CM 5

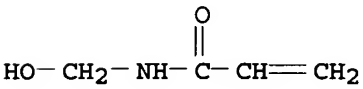
CRN 97-65-4
CMF C5 H6 O4



RN 571202-21-6 HCAPLUS
CN Butanedioic acid, methylene-, polymer with 2-ethylhexyl 2-methyl-2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

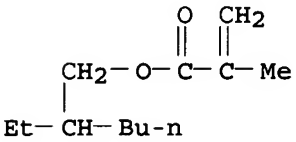
CM 1

CRN 924-42-5
CMF C4 H7 N O2



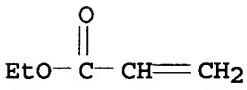
CM 2

CRN 688-84-6
CMF C12 H22 O2



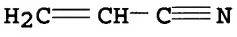
CM 3

CRN 140-88-5
CMF C5 H8 O2



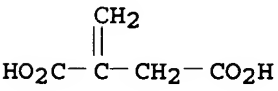
CM 4

CRN 107-13-1
CMF C3 H3 N



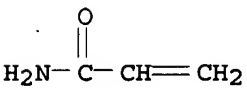
CM 5

CRN 97-65-4
CMF C5 H6 O4



CM 6

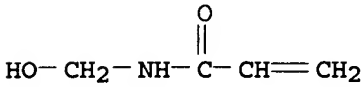
CRN 79-06-1
CMF C3 H5 N O



RN 571202-22-7 HCAPLUS
CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

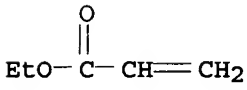
CM 1

CRN 924-42-5
CMF C4 H7 N O2



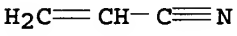
CM 2

CRN 140-88-5
CMF C5 H8 O2



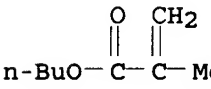
CM 3

CRN 107-13-1
CMF C3 H3 N



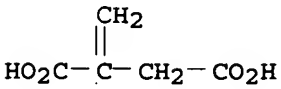
CM 4

CRN 97-88-1
CMF C8 H14 O2



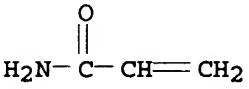
CM 5

CRN 97-65-4
CMF C5 H6 O4



CM 6

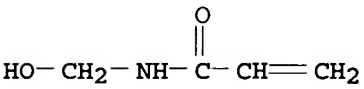
CRN 79-06-1
CMF C3 H5 N O



RN 571202-23-8 HCAPLUS
CN Butanedioic acid, methylene-, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-propenoate, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

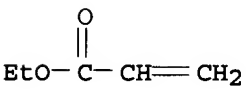
CM 1

CRN 924-42-5
CMF C4 H7 N O2



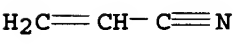
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

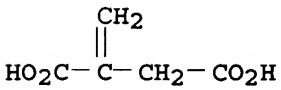
CRN 107-13-1
CMF C3 H3 N



CM 4

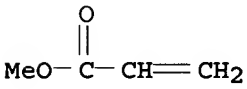
CRN 97-65-4

CMF C5 H6 O4



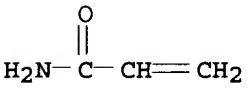
CM 5

CRN 96-33-3
CMF C4 H6 O2



CM 6

CRN 79-06-1
CMF C3 H5 N O



L50 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:87124 HCAPLUS
DN 138:145093
TI Ink-jet recording medium and coating solutions for the medium
IN Funakoshi, Shinji; Takanohashi, Hiroaki
PA Asahi Kasei Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003034074	A2	20030204	JP 2002-137583	20020513
PRAI JP 2001-143518	A	20010514		

AB The medium has ≥1 ink-absorbing layer on a support, wherein (1) at least one of the layer is formed by coating a solution containing emulsion polymers having number-average mol. weight 1000-300,000 or (2) at least one of the layer contains the above polymers. The coating solution may contain inorg. particles. The medium has improved resistance to image fading caused by gases.
IC ICM B41M005-00
ICS B41J002-01
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST ink jet recording medium emulsion polymer coating

IT Ink-jet recording sheets
(ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(sheet support; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 494759-96-5P, Adeka Reasoap SE 1025N-butyl acrylate-diacetone acrylamide-N-isopropylacrylamide-methyl methacrylate copolymer **494759-99-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(binder, coating containing; **ink-jet** recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 177646-18-3, PVA 235
RL: TEM (Technical or engineered material use); USES (Uses)
(binder, coating containing; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 60764-90-1P, Butyl methacrylate-methacrylamide-methacrylic acid-methyl methacrylate-styrene copolymer 474014-76-1P 494759-93-2P, Acrylic acid-Adeka Reasoap SE 1025N-adipic acid, dihydrazide-butyl acrylate-diacetone acrylamide-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate copolymer 494759-95-4P, Acrylic acid-Adeka Reasoap SE 1025N-butyl acrylate-diacetone acrylamide-2-hydroxyethyl methacrylate-methyl methacrylate copolymer **494759-97-6P** 494759-98-7P **494760-00-8P** **494760-01-9P** 494760-02-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(coating containing; **ink-jet** recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 7631-86-9, Aerosil 200, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, PS-SO, coating containing; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 1344-28-1, Aluminasol 200, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, coating containing; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 302-01-2DP, Hydrazine, reaction products with polyisocyanate 28182-81-2DP, Hexamethylene diisocyanate homopolymer, reaction products with hydrazine
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(crosslinker, coating containing; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 822-06-0, Hexamethylene diisocyanate
RL: RCT (Reactant); RACT (Reactant or reagent)
(ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 494759-94-3P, Acrylic acid-Adeka Reasoap SE 1025N-butyl acrylate-diacetone acrylamide-2-hydroxyethyl methacrylate-N-isopropylacrylamide-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polysemicarbazide-crosslinked, coating containing; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

IT 25038-59-9, Poly(ethylene terephthalate), uses
RL: TEM (Technical or engineered material use); USES (Uses)
(sheet support; ink-jet recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

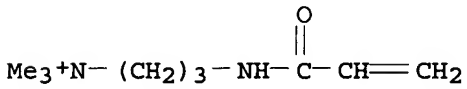
IT **494759-99-8P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(binder, coating containing; **ink-jet** recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

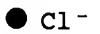
RN 494759-99-8 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

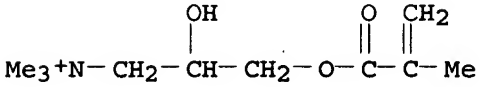
CRN 45021-77-0
CMF C9 H19 N2 O . Cl

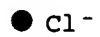




CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl

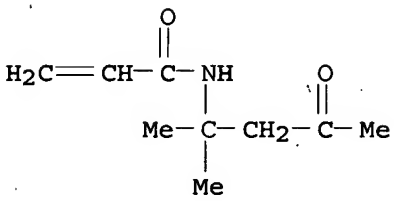




CM 3

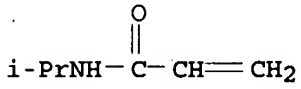
CRN 2873-97-4

CMF C9 H15 N O2



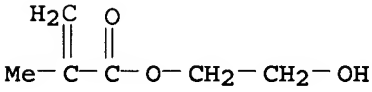
CM 4

CRN 2210-25-5
CMF C6 H11 N O



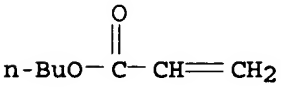
CM 5

CRN 868-77-9
CMF C6 H10 O3



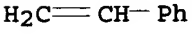
CM 6

CRN 141-32-2
CMF C7 H12 O2



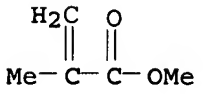
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

CRN 80-62-6
CMF C5 H8 O2



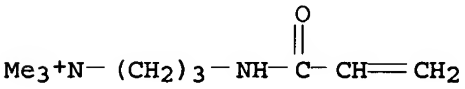
IT **494759-97-6P 494760-00-8P 494760-01-9P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(coating containing; **ink-jet** recording sheet having ink-absorbing layer formed with emulsion polymer coating for gas resistance)

RN 494759-97-6 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, hexanedioic acid dihydrazide, 2-hydroxyethyl 2-methyl-2-propenoate, 2-(methylamino)ethyl 2-methyl-2-propenoate hydrochloride, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

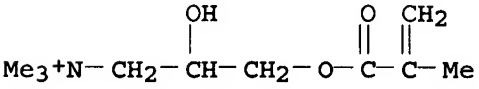
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



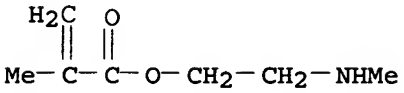
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



CM 3

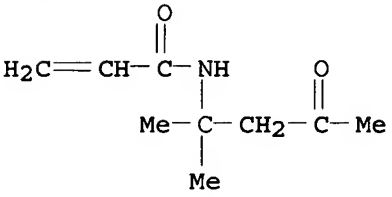
CRN 4664-29-3
CMF C7 H13 N O2 . Cl H



● HCl

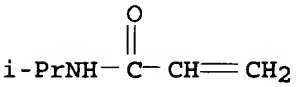
CM 4

CRN 2873-97-4
CMF C9 H15 N O2



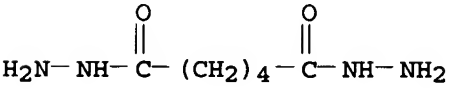
CM 5

CRN 2210-25-5
CMF C6 H11 N O



CM 6

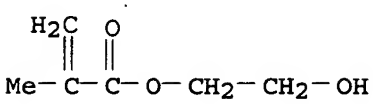
CRN 1071-93-8
CMF C6 H14 N4 O2



CM 7

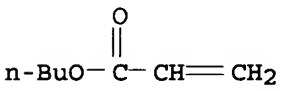
CRN 868-77-9

CMF C6 H10 O3



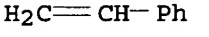
CM 8

CRN 141-32-2
CMF C7 H12 O2



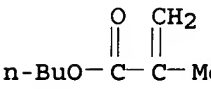
CM 9

CRN 100-42-5
CMF C8 H8



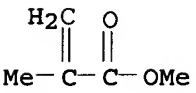
CM 10

CRN 97-88-1
CMF C8 H14 O2



CM 11

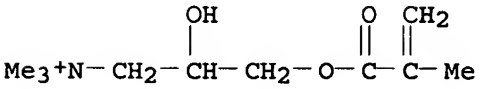
CRN 80-62-6
CMF C5 H8 O2



RN 494760-00-8 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-methyl-2-propenoate, 2-(methylamino)ethyl 2-methyl-2-propenoate hydrochloride, methyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

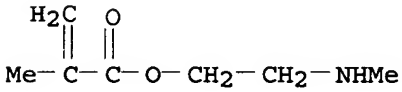
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



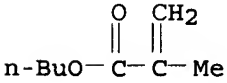
CM 2

CRN 4664-29-3
CMF C7 H13 N O2 . Cl H



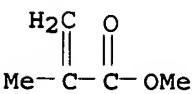
CM 3

CRN 97-88-1
CMF C8 H14 O2



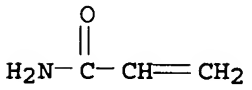
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

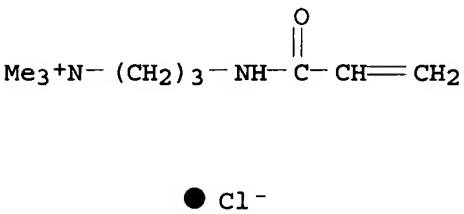
CRN 79-06-1
CMF C3 H5 N O



RN 494760-01-9 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, hexanedioic acid dihydrazide, 2-hydroxyethyl 2-methyl-2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

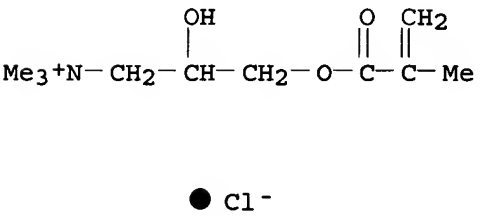
CM 1

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



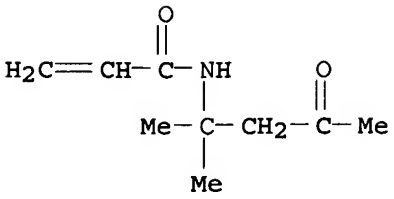
CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



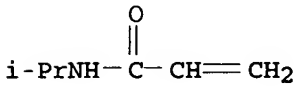
CM 3

CRN 2873-97-4
CMF C9 H15 N O2



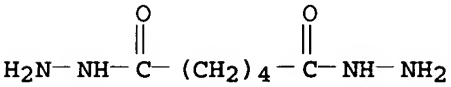
CM 4

CRN 2210-25-5
CMF C6 H11 N O



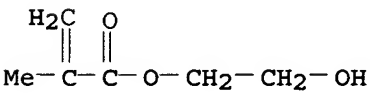
CM 5

CRN 1071-93-8
CMF C6 H14 N4 O2



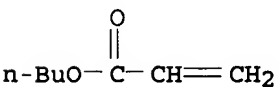
CM 6

CRN 868-77-9
CMF C6 H10 O3



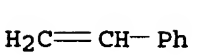
CM 7

CRN 141-32-2
CMF C7 H12 O2



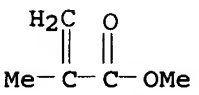
CM 8

CRN 100-42-5
CMF C8 H8



CM 9

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:955332 HCAPLUS
DN 138:47336
TI Ink-jet printing sheets containing cationic polymer in ink-receptor layer
IN Ito, Akira; Haino, Kozo
PA Mitsubishi Paper Mills, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002362012	A2	20021218	JP 2001-173923	20010608
PRAI JP 2001-173923		20010608		

AB The title printing sheet has an ink-receptor layer containing a cationic polymer on a support, wherein the cationic polymer has a repeating unit, which is chosen from non-cyclic hydrazine derivative structure and hydroxylamine derivative structure, and a repeating unit providing cationic character. The printing sheet shows the photog.-like glossiness, high ink-absorption, and the good image storageability.
IC ICM B41M005-00
ICS B41J002-01; C08K003-00; C08K005-00; C08L101-02; C08L101-14
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
ST ink jet printing sheet cationic polymer receptor layer
IT Ink-jet recording sheets
(ink-jet printing sheets containing cationic polymer in ink-receptor layer)
IT 478930-38-0P 478930-39-1P 478930-40-4P 478930-41-5P
478930-43-7P 478930-44-8P 478930-45-9P 478930-47-1P
478930-48-2P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(cationic polymer; **ink-jet** printing sheets containing cationic polymer in ink-receptor layer)
IT **478930-43-7P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

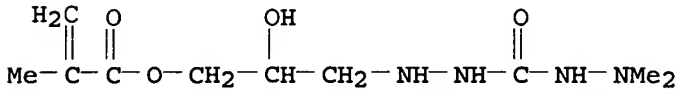
(cationic polymer; **ink-jet** printing sheets containing cationic polymer in ink-receptor layer)

RN 478930-43-7 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 3-[2-[(2,2-dimethylhydrazino)carbonyl]hydrazino]-2-hydroxypropyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

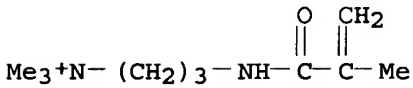
CM 1

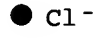
CRN 478930-42-6
CMF C10 H20 N4 O4



CM 2

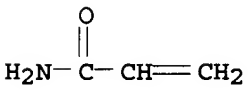
CRN 51410-72-1
CMF C10 H21 N2 O . Cl





CM 3

CRN 79-06-1
CMF C3 H5 N O



L50 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:466721 HCAPLUS
DN 137:34608
TI Ink jet recording method and ink set
IN Miyabayashi, Toshiyuki
PA Seiko Epson Corporation, Japan
SO U.S. Pat. Appl. Publ., 35 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002077385	A1	20020620	US 2001-952033	20010912
	US 6864302	B2	20050308		
	JP 2002347338	A2	20021204	JP 2001-278838	20010913
	JP 3644498	B2	20050427		
PRAI	JP 2000-280814	A	20000914		
	JP 2001-83337	A	20010322		

AB An ink jet recording method comprising a step of bringing a 1st ink composition into contact with a 2nd ink composition on a recording medium to form an aggregate, where the 1st ink composition comprises at least a water-soluble organic solvent, H2O and a coloring agent comprising a coloring material encapsulated with a polymer having an anionic group, and the 2nd ink composition comprises at least a water-soluble organic solvent, H2O and a coloring agent comprising a coloring material encapsulated with a polymer having a cationic group. Thus, an ink set contained carbon black-based ink containing cationic polymer 3, glycerol solvent, 2-pyrrolidone 4, and water, and magenta, cyan, and yellow inks containing anionic polymer, glycerol, 2-pyrrolidone, surfactant, C.I. Pigment Red 122, C.I. Pigment Blue 15:3, and C.I. Pigment Yellow 185, resp., and water.

IC ICM C09D005-00
INCL 523160000
CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 74
ST cationic anionic polymer encapsulated colorant jet printing ink
IT Microcapsules
Pigments, nonbiological
(ink-jet multi-ink sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet multi-ink sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)
IT Inks
(jet-printing, water-thinned; ink-jet multi-ink sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)
IT Epoxy resins, uses
Polyamides, uses
Polyesters, uses
Polyimides, uses
Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymer encapsulated colorant; ink-jet multi-ink sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)
IT 25586-20-3P, Acrylic acid butyl acrylate styrene copolymer
437761-47-2P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(fine particle vehicle; **ink-jet** multi-**ink** sets containing aqueous inks containing complimentary ionic polymer-encapsulated

colorants for images with high d., no bleeding and scratch resistance)

IT 147-14-8, C.I. Pigment Blue 15:3 980-26-7, C.I. Pigment Red 122
31837-42-0, C.I. Pigment Yellow 151 76199-85-4, C.I. Pigment Yellow 185
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet multi-ink sets containing aqueous inks containing complimentary ionic
polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)

IT **437761-48-3P** 437761-49-4P, Dimethylaminoethylmethyl chloride methacrylate-N,N'-dimethylaminopropylacrylamide-divinylbenzene copolymer 437761-50-7P, Benzyl methacrylate-butyl methacrylate-dicyclopentanyl methacrylate-methacrylic acid-SE 10N copolymer 437761-51-8P, 2-Acrylamido-2-methylpropanesulfonic acid-SE 10N copolymer 437761-52-9P 437761-53-0P 437761-54-1P, Benzyl methacrylate-butyl methacrylate-methacrylic acid-SE 10N copolymer 437761-55-2P 437761-57-4P 437761-59-6P 437761-60-9P 437761-61-0P **437761-62-1P** 437761-63-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(polymer encapsulated colorant; **ink-jet** multi-**ink** sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)

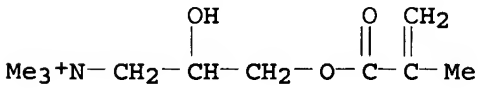
IT **437761-47-2P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(fine particle vehicle; **ink-jet** multi-**ink** sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)

RN 437761-47-2 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

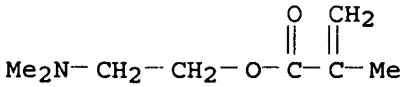
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



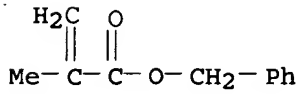
CM 2

CRN 2867-47-2
CMF C8 H15 N O2



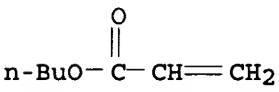
CM 3

CRN 2495-37-6
CMF C11 H12 O2



CM 4

CRN 141-32-2
CMF C7 H12 O2

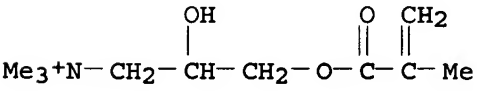


IT **437761-48-3P 437761-62-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(polymer encapsulated colorant; **ink-jet** multi-**ink** sets containing aqueous inks containing complimentary ionic polymer-encapsulated colorants for images with high d., no bleeding and scratch resistance)

RN 437761-48-3 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

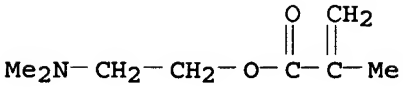
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



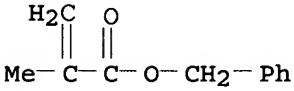
CM 2

CRN 2867-47-2
CMF C8 H15 N O2



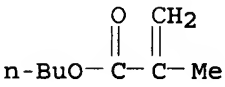
CM 3

CRN 2495-37-6
CMF C11 H12 O2



CM 4

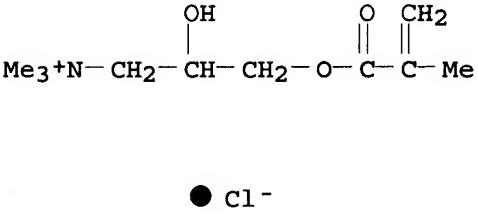
CRN 97-88-1
CMF C8 H14 O2



RN 437761-62-1 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with diethenylbenzene, N-[3-(dimethylamino)propyl]-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

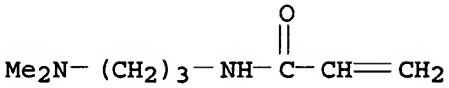
CRN 13052-11-4
CMF C10 H20 N O3 . Cl



CM 2

CRN 3845-76-9

CMF C8 H16 N2 O



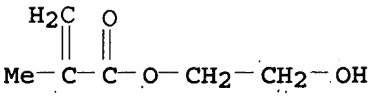
CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS

2 [D1—CH═CH2]

CM 4

CRN 868-77-9
CMF C6 H10 O3



L50 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:422850 HCAPLUS
DN 137:13279
TI Ink-jet printing sheet and cationic acrylic polymer binder for it
IN Maekawa, Masatoshi; Shinohara, Shuichiro
PA Nisshin Kagaku Kogyo K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002160443	A2	20020604	JP 2000-359061	20001127
PRAI JP 2000-359061		20001127		

AB The binder contains a cationic acrylic emulsion with glass transition temperature from -50 to 80° and particle size 50-1000 nm prepared by emulsion polymerization of (meth)acrylic acid esters [except amino-containing (meth)acrylic monomers] using glycidyltrimethylammonium chloride and/or poly(dimethylmethylene piperidinium chloride) as a cationic emulsifier.

The sheet gives high d. images with high resolution and water resistance.

IC ICM B41M005-00
ICS B32B027-10; B32B027-30; B41J002-01; C08F002-28; C08F020-10

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST ink jet printing sheet cationic acrylic polymer; emulsion polymn cationic emulsifier acrylic polymer

IT Polymerization
(emulsion; ink-jet printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

IT Binders
Ink-jet recording sheets
(ink-jet printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

IT 9002-98-6, SP 018
RL: TEM (Technical or engineered material use); USES (Uses)
(SP 018; ink-jet printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

IT 3033-77-0, Glycidyltrimethylammonium chloride 32168-43-7
RL: NUU (Other use, unclassified); USES (Uses)
(emulsifier; ink-jet printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

IT 26098-32-8P, 2-Hydroxyethyl methacrylate-methyl acrylate-methyl methacrylate copolymer 29763-01-7P, Acrylonitrile-butyl acrylate-ethyl acrylate-methyl methacrylate copolymer **68966-73-4P**, Acrylonitrile-butyl acrylate-ethyl acrylate-methyl methacrylate-N-methylol acrylamide copolymer 73692-33-8P, Ethyl acrylate-2-hydroxyethyl methacrylate-methyl acrylate-methyl methacrylate copolymer **350009-67-5P**, Butyl acrylate-ethyl acrylate-2-hydroxyethyl methacrylate-N-methylol acrylamide copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

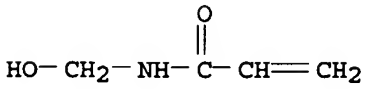
IT 9002-89-5, PA 15 9004-34-6, Cellulose, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

IT **68966-73-4P**, Acrylonitrile-butyl acrylate-ethyl acrylate-methyl methacrylate-N-methylol acrylamide copolymer **350009-67-5P**, Butyl acrylate-ethyl acrylate-2-hydroxyethyl methacrylate-N-methylol acrylamide copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing sheet using cationic acrylic polymer prepared by emulsion polymerization)

RN 68966-73-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

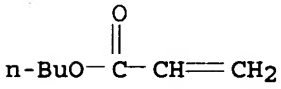
CM 1

CRN 924-42-5
CMF C4 H7 N O2



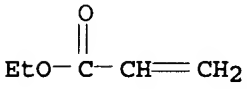
CM 2

CRN 141-32-2
CMF C7 H12 O2



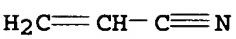
CM 3

CRN 140-88-5
CMF C5 H8 O2



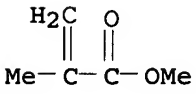
CM 4

CRN 107-13-1
CMF C3 H3 N



CM 5

CRN 80-62-6
CMF C5 H8 O2

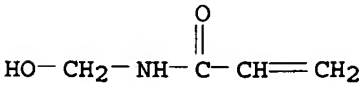


RN 350009-67-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, ethyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

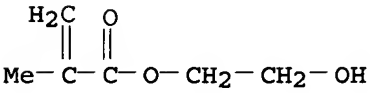
CRN 924-42-5

CMF C4 H7 N O2



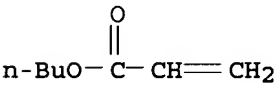
CM 2

CRN 868-77-9
CMF C6 H10 O3



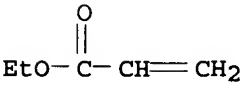
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 140-88-5
CMF C5 H8 O2



L50 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:364200 HCAPLUS
DN 136:377578
TI Optical element for liquid crystal device, its manufacture, and transfer film for it
IN Okada, Yoshikatsu; Sakamoto, Junichi; Iwata, Kenichi
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002139612	A2	20020517	JP 2000-331659	20001031

PRAI JP 2000-331659 20001031

AB The transfer film comprises a base film successively coated with 1st ink-repellent photosensitive resin layer and 2nd ink-philic photosensitive resin layer layer. The element, comprising a support having barrier rib and pixels, is manufactured by the steps of (1) laminating the transfer layer contacting the 2nd layer on the support, (2) patternwise exposing the transfer layer, (3) peeling the base film from the transfer layer, (4) developing the transfer layer to form barrier ribs, and (6) filling an ink in an area surrounded with the barrier ribs by ink-jet method. The obtained optical element which may be a color filter, liquid crystal device and electroluminescent device using the element are also claimed. Color filter without color contamination and white defect is obtained.

IC ICM G02B005-20
ICS G02F001-1335; G09F009-30

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

ST optical filter ink jet manuf; barrier rib ink philic repellent photosensitive layer; liq crystal display electroluminescent device color filter

IT Surfactants
(fluorosurfactants, ink-repellent layer; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(ink-repellent layer; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT Electroluminescent devices
Ink-jet printing
Liquid crystal displays
Optical filters
(manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT **160109-42-2P**, Hydroxyethyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ink composition; manufacture of optical filter by **ink-jet** method using barrier rib comprising ink-philic and ink-repellent layers)

IT 7128-64-5, BBOT 25067-59-8, Poly(N-vinylcarbazole)
RL: TEM (Technical or engineered material use); USES (Uses)
(ink composition; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT 299398-75-7, V 259 412916-90-6, CT 2000L
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-philic layer; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT 9016-00-6, Dimethylsiloxane 11114-17-3, Fluorad FC 430 31900-57-9
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(ink-repellent layer; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT 9011-14-7, Poly(Methyl methacrylate) 15625-89-5, Trimethylolpropane triacrylate 26355-01-1, Hydroxyethyl methacrylate-methyl methacrylate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)

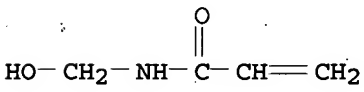
(ink-repellent layer; manufacture of optical filter by ink-jet method using barrier rib comprising ink-philic and ink-repellent layers)

IT **160109-42-2P**, Hydroxyethyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ink composition; manufacture of optical filter by **ink-jet** method using barrier rib comprising ink-philic and ink-repellent layers)

RN 160109-42-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

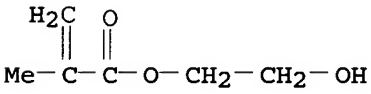
CM 1

CRN 924-42-5
CMF C4 H7 N O2



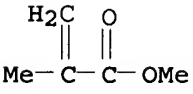
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2

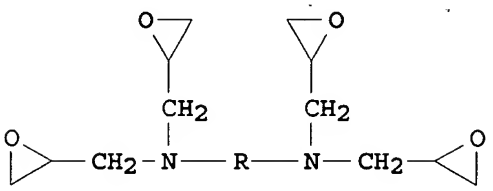


L50 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:204876 HCAPLUS
DN 136:254567
TI Polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet
IN Kitazawa, Satoshi; Fukuda, Masayuki
PA Teijin Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002079747	A2	20020319	JP 2001-82542	20010322
PRAI	JP 2000-206450	A	20000707		

GI



I

AB The title polyester base film comprises an adhesive layer for an ink receiving layer on one side of the film and an antistatic layer on the other side of the film, wherein the adhesive layer comprises 30-80 % of (A) copolyester with a second transition temperature of 20-90°, 15-45 % of (B) poly(vinyl alc.) with a saponification degree of 80-90 mol%, 3-25 % of (C) microparticles with an average particle size of 20-80 nm, and 5-20 % of (D) a compound represented by I [R = -CH2-(m-C6H4)-CH2-, -CH2-(m-C6H10)-CH2-, -(p-C6H4)-CH2-(p-C6H4)-], and the adhesive layer shows a surface energy of 50-70 mN/m. The antistatic layer comprises 5-50 % of polycation polymer antistatic agent, and 40-85 % of a binder(s) selected from polyester and acrylic resin. The polyester base film is a white polyester film showing glossiness of ≥50 and optical transmittance of ≤20 %. The polyester base film shows excellent blocking-resistance, adhesion, antistatic properties, and runnability.

IC ICM B41M005-00
ICS B32B027-36; C08J007-04; C09D129-04; C09D167-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST polyester base film ink jet printing sheet adhesive layer

IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinked, adhesive layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT Ionene polymers
RL: TEM (Technical or engineered material use); USES (Uses)
(polycation polymer, antistatic layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT Ink-jet recording sheets
(polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT Polyesters, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered

material use); PREP (Preparation); PROC (Process); USES (Uses)
(polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 73144-93-1P, Ethylene glycol-isophthalic acid-neopentyl glycol-5-sodium sulfoisophthalic acid-terephthalic acid copolymer 89917-19-1P, Diethylene glycol-ethylene glycol-isophthalic acid-neopentyl glycol-5-Sodiosulfoisophthalic acid-terephthalic acid copolymer 167025-13-0P, Ethylene glycol-isophthalic acid-2,6-naphthalenedicarboxylic acid-neopentyl glycol-Monopotassium 5-sulfoisophthalate copolymer 180483-28-7P, 1,4-Butanediol-diethylene glycol-ethylene glycol-isophthalic acid-neopentyl glycol-Monopotassium 5-sulfoisophthalate-terephthalic acid copolymer 274913-17-6P, 1,4-Butanediol-diethylene glycol-ethylene glycol-isophthalic acid-2,6-naphthalenedicarboxylic acid-neopentyl glycol-5-Sodiosulfoisophthalic acid-terephthalic acid copolymer 274913-18-7P, 1,4-Butanediol-ethylene glycol-isophthalic acid-2,6-naphthalenedicarboxylic acid-neopentyl glycol-5-Sodiosulfoisophthalic acid copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(adhesive layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 9002-92-0, Poly(oxyethylene) lauryl ether 63738-22-7 65992-66-7
RL: TEM (Technical or engineered material use); USES (Uses)
(adhesive layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT **79401-34-6P**, Acrylonitrile-ethyl acrylate-methyl methacrylate-N-methylol methacrylamide copolymer 368884-74-6P, 1,4-Cyclohexanedimethanol-4,4'-diphenyldicarboxylic acid-ethylene glycol-isophthalic acid-2,6-naphthalenedicarboxylic acid-neopentyl glycol-terephthalic acid copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(antistatic layer; polyester base film showing improved adhesion to ink receiving layer suitable for **ink jet** printing sheet)

IT 7631-86-9, Silica, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, adhesive layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 9080-79-9, Sodium Polystyrenesulfonate 31512-74-0 83543-32-2 227945-33-7
RL: TEM (Technical or engineered material use); USES (Uses)
(polycation polymer, antistatic layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 25038-59-9P, Ethylene glycol-terephthalic acid copolymer, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 9002-89-5, Poly(vinyl alcohol)
RL: TEM (Technical or engineered material use); USES (Uses)
(saponified, adhesive layer; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

IT 13463-67-7, Titanium oxide, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(white pigment; polyester base film showing improved adhesion to ink receiving layer suitable for ink jet printing sheet)

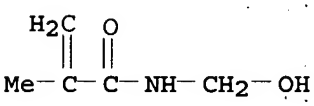
IT **79401-34-6P**, Acrylonitrile-ethyl acrylate-methyl methacrylate-N-methylol methacrylamide copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(antistatic layer; polyester base film showing improved adhesion to ink receiving layer suitable for **ink jet** printing sheet)

RN 79401-34-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

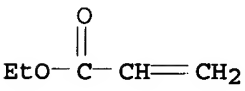
CM 1

CRN 923-02-4
CMF C5 H9 N O2



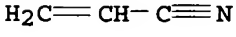
CM 2

CRN 140-88-5
CMF C5 H8 O2



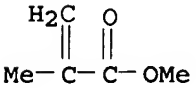
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:25952 HCAPLUS
DN 136:93526
TI Color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same
IN Yuasa, Satoshi
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002003749	A2	20020109	JP 2000-191240	20000626
PRAI JP 2000-191240		20000626		

AB The title ink colors by light coherence of regularly disposed fine particles on a recording sheet, wherein the fine particles have transparent resin layer of -10-70 °C glass transition temperature on the surface. The ink is fixed well on a recording sheet and shows the good moisture resistance.
IC ICM C09D004-00
ICS B41M005-00; B44F001-02; C09D011-00; G03F007-105; G03F007-11
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
ST color printing ink particle light coherence app jet printer
IT Ink-jet printers
Printing (nonimpact)
(color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same)
IT Inks
(jet-printing; color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same)
IT Inks
(non-impact printing; color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same)
IT 7631-86-9, Silica, preparation
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same)
IT 631-36-7, Tetraethylsilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(color printing ink containing fine particles displaying color by light coherence and method and apparatus such as ink-jet printer for printing using same)
IT 26588-80-7, Styrene-methyl methacrylate-2-hydroxyethyl methacrylate-butyl acrylate copolymer **36426-47-8**, Styrene-methacrylic acid-ethyl acrylate-N-methylolacrylamide copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(color printing ink containing fine particles displaying color by light coherence and method and apparatus such as **ink-jet**

printer for printing using same)

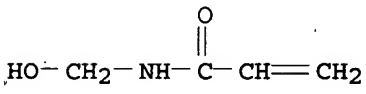
IT **36426-47-8**, Styrene-methacrylic acid-ethyl acrylate-N-methylolacrylamide copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(color printing ink containing fine particles displaying color by light coherence and method and apparatus such as **ink-jet** printer for printing using same)

RN 36426-47-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, ethyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

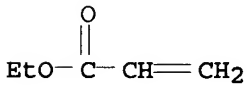
CM 1

CRN 924-42-5
CMF C4 H7 N O2



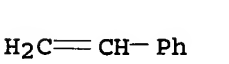
CM 2

CRN 140-88-5
CMF C5 H8 O2



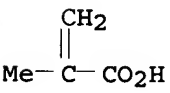
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 79-41-4
CMF C4 H6 O2

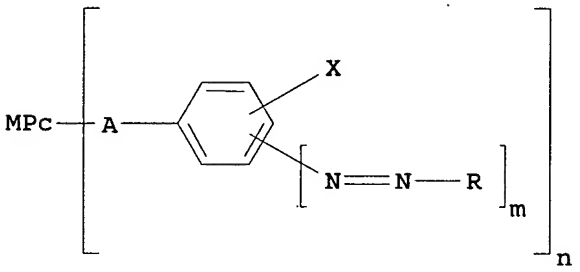


L50 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:569592 HCAPLUS

DN 135:160199
TI Printing ink, ink-jet printing method, manufacture of color filter, film-forming ink, manufacture of liquid crystal display panel, and the display panel
IN Hirose, Masashi
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001214096	A2	20010807	JP 2000-22427	20000131
PRAI	JP 2000-22427		20000131		

OS MARPAT 135:160199
GI



I

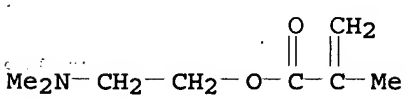
AB The ink contains a phthaloycanine-type colorant I [involving ≥2 sulfonate (salt) structure; Pc = phthalocyanine backbone; M = 2 Na, 2 Li, divalent metal, tri- or tetravalent metal derivative; X = H, sulfone, sulfonamide, carboxyl, NO2, halogen, (substituted) alkyl, alkoxy, aryl; A = O, S; R = (substituted) aryl, (substituted) 5- or 6-membered aromatic heterocycle; m = 0, 1; n = 1-4] and a water-soluble organic solvent, which is used in ink-jet printing. The film-forming ink contains I, a water-soluble organic solvent, and a film-forming component, which is converted to a film by heating and/or irradiation The color filter is manufactured by forming plurality of color picture elements using the above inks by ink-jet printing. The liquid crystal display panel is that manufactured by the claimed process using the color filter. The ink showing good extrusion from nozzle in ink-jet printing provides the color filter with good adhesion to substrate and high contrast.

IC ICM C09D011-00
ICS B41J002-01; B41M005-00; G02B005-20; G02F001-1335
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 42
ST printing ink phthalocyanine colorant color filter; jet printing ink color filter manuf; water sol org solvent printing ink; film forming ink jet printing; liq crystal display color filter
IT Cyanine dyes
Heat-resistant materials
Liquid crystal displays
Optical filters
Transparent films

(jet-printing ink containing phthalocyanine colorant for manufacture of color
filter for liquid crystal display devices)
IT Inks
(jet-printing; jet-printing ink containing phthalocyanine colorant for manufacture of color filter for liquid crystal display devices)
IT 352684-93-6
RL: DEV (Device component use); USES (Uses)
(jet-printing ink containing phthalocyanine colorant for manufacture of color
filter for liquid crystal display devices)
IT **219679-25-1P**, Acrylic acid-N,N-dimethylaminoethyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-N-methylolacrylamide copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(**jet**-printing **ink** containing phthalocyanine colorant for manufacture of color filter for liquid crystal display devices)
IT 352700-87-9 352700-89-1 352700-91-5 352700-93-7
RL: TEM (Technical or engineered material use); USES (Uses)
(jet-printing ink containing phthalocyanine colorant for manufacture of color
filter for liquid crystal display devices)
IT **219679-25-1P**, Acrylic acid-N,N-dimethylaminoethyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-N-methylolacrylamide copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(**jet**-printing **ink** containing phthalocyanine colorant for manufacture of color filter for liquid crystal display devices)
RN 219679-25-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

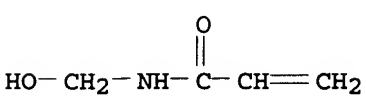
CM 1

CRN 2867-47-2
CMF C8 H15 N O2



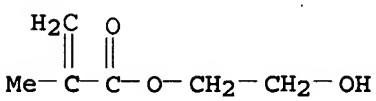
CM 2

CRN 924-42-5
CMF C4 H7 N O2



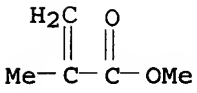
CM 3

CRN 868-77-9
CMF C6 H10 O3



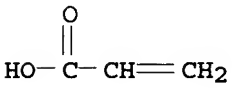
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2



L50 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:414610 HCAPLUS
DN 135:26960
TI Ink-jet ink for manufacturing color filter of liquid crystal display and method for manufacture thereof
IN Kashiwazaki, Akio; Yamashita, Yoshihisa; Nakazawa, Koichiro; Hirose, Masashi; Yokoyama, Mayumi; Shirota, Kachihiro
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

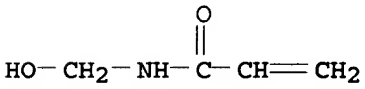
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001154009	A2	20010608	JP 1999-335252	19991126
PRAI JP 1999-335252		19991126		

AB The title ink contains ≥0.1 % acrylic copolymer of ≥1000 weight average mol. weight and colorant, wherein acrylic copolymer is prepared from an acrylic monomer having OH groups, an acrylic monomer having COOH groups, and a hydrophobic monomer. The ink provides the color filter of a liquid crystal display by an ink-jet printing process in the decreased production cost and in the simple process.
IC ICM G02B005-20
ICS C09D011-10; G02F001-1335; G03F007-004

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 42, 73
ST ink jet manufg color filter liq crystal display manuf
IT Optical filters
(ink for manufacturing color filter of liquid crystal display and method for manufacture thereof)
IT Inks
(jet-printing; ink for manufacturing color filter of liquid crystal display and
method for manufacture thereof)
IT 39921-94-3P, 2-Hydroxyethyl methacrylate-acrylic acid-methyl methacrylate copolymer 62226-32-8P, 2-Hydroxyethyl methacrylate-acrylic acid-butyl methacrylate copolymer **63103-13-9P**, N-Methylolacrylamide-acrylic acid-ethyl methacrylate copolymer 207983-18-4P, 2-Hydroxyethyl methacrylate-acrylic acid-isobornyl methacrylate copolymer 343309-37-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(copolymer in **ink-jet ink**)
IT **63103-13-9P**, N-Methylolacrylamide-acrylic acid-ethyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(copolymer in **ink-jet ink**)
RN 63103-13-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

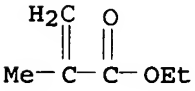
CM 1

CRN 924-42-5
CMF C4 H7 N O2



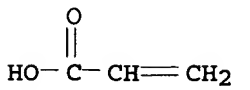
CM 2

CRN 97-63-2
CMF C6 H10 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



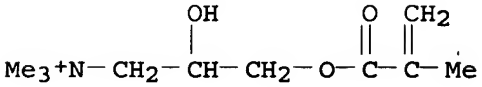
L50 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:36904 HCAPLUS
DN 134:101642
TI Cationic resin, antistatic agent based on the resin, and the recording-receiving material for use in ink jets
IN Seko, Toshiya; Kitani, Yasuo
PA Mitsubishi Chemical Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001011125	A2	20010116	JP 1999-179327	19990625
PRAI JP 1999-179327		19990625		

AB The title cationic resins have cationic groups which consist of quaternary ammonium groups in which the counterion is a carboxylate anion. The cationic resins are typically acrylic polymers. An antistatic polymer was prepared by polymerization of methacrylamidopropyldimethyl hydroxypropylammonium acetate using AIBN.
IC ICM C08F020-36
ICS B41J002-01; B41M005-00; C08F020-60; C09K003-16; D06P005-00; C09D005-00; C09D133-14; C09D133-24; C09D201-02
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42
ST cationic polymer antistatic agent recording material
IT Antistatic agents
Recording materials
(cationic resin, antistatic agent based on the resin, and the recording-receiving material for use in ink jets)
IT 79-10-7DP, Acrylic acid, C12-13 alkyl esters, polymers with acrylate monomers 80-62-6DP, polymers with acrylic monomers 100-42-5DP, Styrene, polymers with acrylic monomers 73170-81-7DP, polymers with acrylic monomers **178059-69-3DP**, polymers with acrylic monomers **320405-79-6P** 320405-80-9P **320405-81-0P** **320405-82-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(cationic resin, antistatic agent based on the resin, and the recording-receiving material for use in **ink jets**)
IT **178059-69-3DP**, polymers with acrylic monomers **320405-79-6P** **320405-81-0P** **320405-82-1P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(cationic resin, antistatic agent based on the resin, and the recording-receiving material for use in **ink jets**)
RN 178059-69-3 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, acetate (salt) (9CI) (CA INDEX NAME)

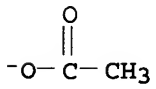
CM 1

CRN 31652-17-2
CMF C10 H20 N O3



CM 2

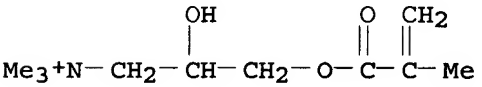
CRN 71-50-1
CMF C2 H3 O2



RN 320405-79-6 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, acetate (salt), homopolymer (9CI) (CA INDEX NAME)

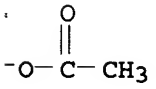
CM 1

CRN 31652-17-2
CMF C10 H20 N O3



CM 2

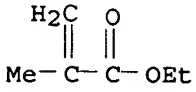
CRN 71-50-1
CMF C2 H3 O2



RN 320405-81-0 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, acetate (salt), polymer with ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

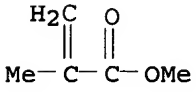
CM 1

CRN 97-63-2
CMF C6 H10 O2



CM 2

CRN 80-62-6
CMF C5 H8 O2

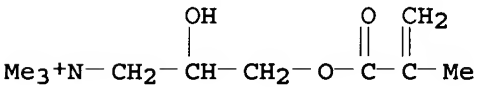


CM 3

CRN 178059-69-3
CMF C10 H20 N O3 . C2 H3 O2

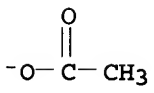
CM 4

CRN 31652-17-2
CMF C10 H20 N O3



CM 5

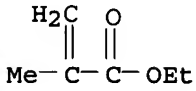
CRN 71-50-1
CMF C2 H3 O2



RN 320405-82-1 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N-dimethyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]propyl]-, acetate (salt), polymer with ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

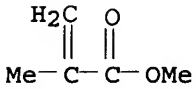
CM 1

CRN 97-63-2
CMF C6 H10 O2



CM 2

CRN 80-62-6
CMF C5 H8 O2

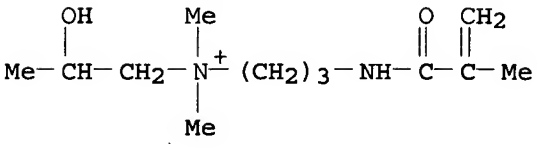


CM 3

CRN 73170-81-7
CMF C12 H25 N2 O2 . C2 H3 O2

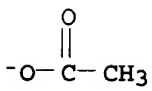
CM 4

CRN 73170-80-6
CMF C12 H25 N2 O2



CM 5

CRN 71-50-1
CMF C2 H3 O2



L50 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:634872 HCAPLUS
DN 133:230408
TI Ink-jet recording paper containing cationic resin and silica
IN Suzuki, Akira; Sunakawa, Hirokazu; Asano, Shinichi
PA Oji Paper Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000247021	A2	20000912	JP 1999-56837	19990304
PRAI	JP 1999-56837		19990304		

AB The paper comprises a substrate coated with ≥1 recording layers 1 of which contains a cationic copolymer having silanol groups and tertiary amino or quaternary ammonium salt groups and silica fine particles of which the average particle diams. of the primary and secondary particles are 3-40 and 10-500 nm, resp. The paper shows high gloss, ink absorption, and surface strength and provides high d. images.

IC ICM B41M005-00
ICS B41J002-01; D21H019-32; D21H019-36; D21H027-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST ink jet printing paper cationic resin; silica ink jet printing paper; silanol ammonium group cationic resin printing paper

IT Ink-jet recording sheets
(paper; ink-jet printing paper containing cationic resin and silica)

IT Paper
Paper
(printing, ink-jet; ink-jet printing paper containing cationic resin and silica)

IT 134392-61-3P, Butyl acrylate-KBM 503-Light Ester DM-methyl methacrylate copolymer **211321-43-6P**, Blemmer QA-butyl acrylate-KBM 503-methyl methacrylate copolymer 211321-44-7P, Butyl acrylate-KBM 503-Light Ester DM-styrene copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing paper containing cationic resin and silica)

IT 7631-86-9, Silica, uses 28474-62-6, Acrylamide-2-hydroxy-3-methacryloxypropyltrimethylammonium chloride copolymer 292044-96-3, Ethyl acrylate-KBM 503-Light Ester DM-styrene copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet printing paper containing cationic resin and silica)

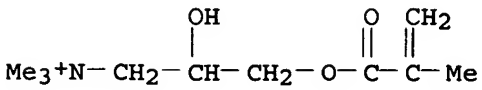
IT **211321-43-6P**, Blemmer QA-butyl acrylate-KBM 503-methyl methacrylate copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing paper containing cationic resin and silica)

RN 211321-43-6 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

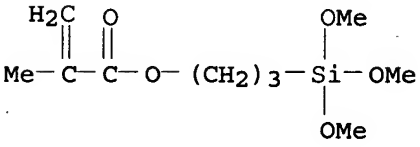
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



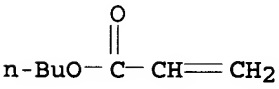
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



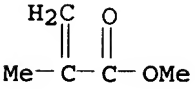
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:526839 HCAPLUS
DN 133:136879
TI Smudge-preventive ink-jet inks, the ink-storing cartridges and printing apparatus therewith
IN Horikoshi, Yuzo; Sakamoto, Katsura; Saruwatari, Norio
PA Fujitsu Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000212487	A2	20000802	JP 1999-19957	19990128
	US 2002111395	A1	20020815	US 2000-492373	20000127
PRAI	JP 1999-19957	A	19990128		

AB Title inks contain colorants, room-temperature-liquid solvents, and primary particles of radical polymerizable monomer resins. An ink comprised phthalocyanine blue 25, diethylene glycol 25, water 400, and 50% emulsion (containing 0.2-μm acrylic acid-Bu acrylate-styrene copolymer) 50 parts gave prints with fast drying ability, adhesion, and color d.

IC ICM C09D011-00
ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

ST aq jet printing ink acrylic styrene polymer binder; smudge prevention aq ink acrylic styrene polymer binder

IT Dyes
Pigments, nonbiological
Solvents
(acrylic styrene polymer primary particle-containing aqueous ink-jet inks with
smudge prevention)

IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic styrene polymer primary particle-containing aqueous ink-jet inks with
smudge prevention)

IT Inks
(jet-printing; acrylic styrene polymer primary particle-containing aqueous ink-jet inks with smudge prevention)

IT Vinyl compounds, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymers; acrylic styrene polymer primary particle-containing aqueous ink-jet
inks with smudge prevention)

IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer 26636-08-8P, 2-Ethylhexyl acrylate-methacrylic acid-styrene copolymer 115785-82-5P 119387-49-4P **121173-53-3P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(acrylic styrene polymer primary particle-containing aqueous **ink-jet inks** with smudge prevention)

IT 111-46-6, Diethylene glycol, uses
RL: NUU (Other use, unclassified); PRP (Properties); USES (Uses)
(acrylic styrene polymer primary particle-containing aqueous ink-jet inks with
smudge prevention)

IT **121173-53-3P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(acrylic styrene polymer primary particle-containing aqueous **ink-jet inks** with smudge prevention)

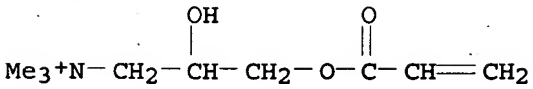
RN 121173-53-3 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA

INDEX NAME)

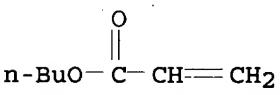
CM 1

CRN 13052-13-6
CMF C9 H18 N O3 . Cl



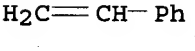
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 100-42-5
CMF C8 H8



L50 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:790893 HCAPLUS
DN 132:42850
TI Coating composition for ink-jet printing material
IN Noguchi, Hiromichi; Higuma, Masahiko; Sato, Yuko
PA Canon K. K., Japan
SO U.S., 17 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6001466	A	19991214	US 1997-838122	19970415
	JP 10292137	A2	19981104	JP 1997-80194	19970331
	JP 3652057	B2	20050525		
PRAI	JP 1996-94058	A	19960416		
	JP 1997-37048	A	19970224		
	JP 1997-80194	A	19970331		

JP 1997-39048 A 19970224

AB A coating composition for ink-jet printing material preparation comprises cationic fine particles of a crosslinked resin, having an average particle diameter ranging from 0.1 μm to 100 μm and a water absorption capacity of at most 25 times by volume, and a binder resin.

IC ICM B41M005-00
ICS B32B005-16

INCL 428327000

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST ink jet printing material cationic resin particle

IT Ink-jet printing
(with ink-receiving layers containing cationic resin particles)

IT 62694-88-6P, Adipic acid-2,2-dimethylolpropionic acid-hexamethylene glycol-isophthalic acid-neopentyl glycol copolymer 252265-09-1P, Ethylenediamine-hexamethylenediamine-neopentyl glycol-tolylene diisocyanate-triethylenediamine copolymer **252265-10-4P**, 3-Chloro-2-hydroxypropyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer 252265-12-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation and use in preparing ink-receiving layers for **ink-jet** printing)

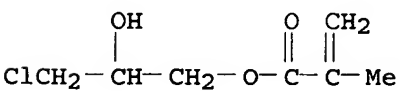
IT **252265-10-4P**, 3-Chloro-2-hydroxypropyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation and use in preparing ink-receiving layers for **ink-jet** printing)

RN 252265-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

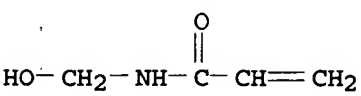
CM 1

CRN 13159-52-9
CMF C7 H11 Cl O3



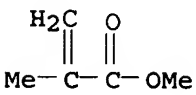
CM 2

CRN 924-42-5
CMF C4 H7 N O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:205409 HCAPLUS
DN 130:259567
TI Oil-based ink-jet printing-type ink and method of making lithographic printing plate using same
IN Kato, Eiichi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11078226	A2	19990323	JP 1997-252191	19970917
PRAI JP 1997-252191		19970917		

AB The ink has oil-dispersed particle resin prepared by copolymn. of: (1) a mono-functional monomer insol. in non-aqueous solvent after polymerization; (2) a monomer having a side ≥ 8 carbon chain soluble in non-aqueous solvent; and (3) a dispersion stabilizing resin soluble in non-aqueous solvent. The lithog. printing plate is made by; (1) printing an image on a lithog. printing plate original having an image-receiving layer having zinc oxide and a binder on a water-resistant support; and (2) desensitizing the non-image part of the plate. The ink provides excellent dispersibility, storage stability, and printing durability. The printing plates provides high quality image and excellent printing durability.
IC ICM B41M005-00
ICS B41C001-10; B41N001-14; C09D011-02
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST Oil ink jet printing lithog plate latex resin particle
IT Ink-jet printing
Lithographic plates
(oil-based ink-jet printing-type ink for lithog. printing plate)
IT Inks
(oil-based; oil-based ink-jet printing-type ink for lithog. printing plate)
IT 39332-53-1, Methyl methacrylate-acrylic acid-methacrylic acid copolymer 60472-57-3D, Methyl methacrylate-methacrylic acid-methyl acrylate-styrene copolymer, reaction products with 4-cyano pentanoic acid 184970-55-6, Methyl methacrylate-acrylic acid-lauryl acrylate-N-vinyl-2-pyrrolidone copolymer 188951-11-3, Methyl methacrylate-styrene-methyl acrylate-2-mercaptobenzoic acid copolymer 221653-56-1, Methyl methacrylate-acrylic acid-methyl acrylate-N-propylacrylamide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(binder for lithog. printing plate)

IT 104922-28-3P, Mono(2-methacryloyloxy)ethyl glutarate-octadecyl methacrylate copolymer ester with allyl alcohol 220728-45-0P 220728-51-8P 221654-03-1P, Dodecyl methacrylate-glycidyl methacrylate-octadecyl methacrylate copolymer ester with 3-acryloyloxy propionic acid
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(dispersion stabilizing resin for oil based-based ink-jet printing-type ink for lithog. printing plate)

IT 1314-13-2, Zinc oxide, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(lithog. printing plate)

IT 221653-63-0P **221653-64-1P** 221653-66-3P 221653-67-4P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(oil-based **ink-jet** printing-type **ink** for lithog. printing plate)

IT 9003-20-7P, Vinyl acetate homopolymer 55778-35-3P, Octadecyl methacrylate-vinyl acetate copolymer 161641-25-4P, Methyl acrylate-methyl methacrylate-octadecyl acrylate copolymer 221653-31-2P, Vinyl acetate-vinyl oleate graft copolymer 221653-32-3P, Vinyl acetate-octadecyl vinyl ether graft copolymer 221653-33-4P, Vinyl acetate-Hexyl (methacryloylethyl)succinate graft copolymer 221653-34-5P 221653-35-6P 221653-36-7P 221653-38-9P 221653-39-0P 221653-40-3P 221653-41-4P 221653-42-5P 221653-44-7P 221653-46-9P 221653-47-0P **221653-50-5P** 221653-52-7P 221653-54-9P 221653-58-3P 221653-59-4P 221653-61-8P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(particle resin for oil based-based **ink-jet** printing-type **ink** for lithog. printing plate)

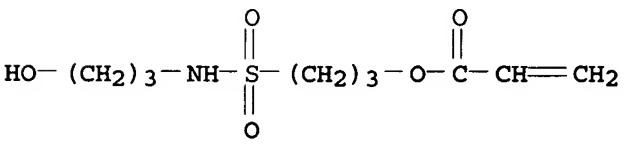
IT **221653-64-1P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(oil-based **ink-jet** printing-type **ink** for lithog. printing plate)

RN 221653-64-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with ethyl 2-propenoate, 3-[[(3-hydroxypropyl)amino]sulfonyl]propyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and octadecyl 2-propenoate, graft (9CI) (CA INDEX NAME)

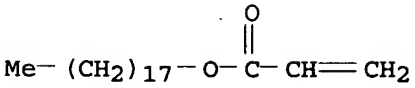
CM 1

CRN 221653-49-2
CMF C9 H17 N O5 S



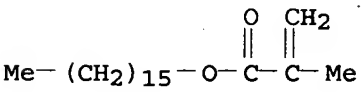
CM 2

CRN 4813-57-4
CMF C21 H40 O2



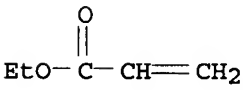
CM 3

CRN 2495-27-4
CMF C20 H38 O2



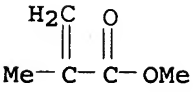
CM 4

CRN 140-88-5
CMF C5 H8 O2



CM 5

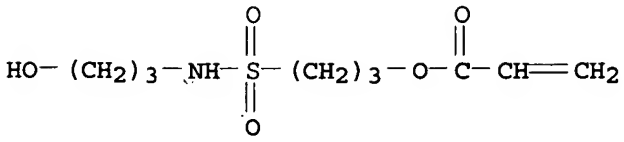
CRN 80-62-6
CMF C5 H8 O2



IT **221653-50-5P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(particle resin for oil based-based **ink-jet** printing-type **ink** for lithog. printing plate)
RN 221653-50-5 HCAPLUS
CN Pentanedioic acid, 2-[(2-chloro-1-oxo-2-propenyl)oxy]ethyl nonyl ester, polymer with 2-cyanoethyl 2-propenoate, hexadecyl 2-methyl-2-propenoate, 3-[[(3-hydroxypropyl)amino]sulfonyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

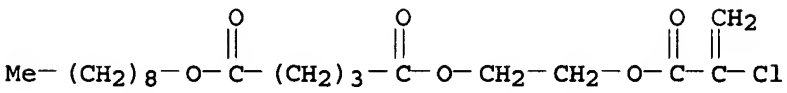
CM 1

CRN 221653-49-2
CMF C9 H17 N O5 S



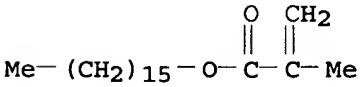
CM 2

CRN 212122-27-5
CMF C19 H31 Cl O6



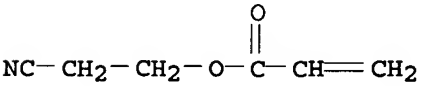
CM 3

CRN 2495-27-4
CMF C20 H38 O2



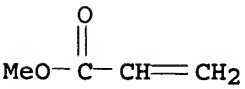
CM 4

CRN 106-71-8
CMF C6 H7 N O2



CM 5

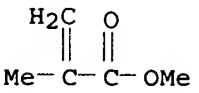
CRN 96-33-3
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



L50 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:535386 HCAPLUS
DN 129:218163
TI Water-resistant coatings for ink-jet printing paper
IN Sugiyama, Toshiaki; Kamata, Satoru; Shiba, Noriyuki
PA Hymo Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

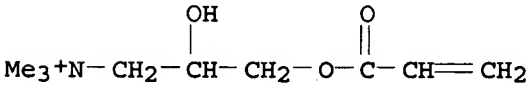
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10219592	A2	19980818	JP 1997-35700	19970205
PRAI JP 1997-35700		19970205		

AB The coatings are obtained from the radical polymerization polymers of (meth)acrylic compds. which are polymerized in the presence of water-soluble or water-dispersible polymers containing glucose units. Thus, polymerizing a 60:40 mixture of oxidized starch and 2-hydroxy-3-acryloyloxypropyltrimethylammonium chloride gave a copolymer for use in coating the surface of ink-jet printing paper for reducing the feathering complication.
IC ICM D21H019-10
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 42, 44
ST feathering prevention oxidized starch graft acrylic; ink printing paper graft polymer coating; cationic starch graft polymer paper coating; quaternary ammonium polymer paper coating; glucan acrylic graft paper coating; surface sizing paper graft acrylic resin
IT Sizes (agents)
(external; water-resistant coatings for ink-jet printing paper)
IT Ink-jet recording sheets
(paper; water-resistant coatings for ink-jet printing paper)
IT Paper
(printing, ink-jet; water-resistant coatings for ink-jet printing paper)
IT Coating materials
(water-resistant coatings for ink-jet printing paper)
IT 79-06-1DP, 2-Propenamide, graft copolymer with oxidized starch and other vinyl monomers, uses 79-10-7DP, 2-Propenoic acid, graft copolymer with oxidized starch and other vinyl monomers, uses 88-12-0DP, graft copolymer with oxidized starch and other vinyl monomers 97-65-4DP, Itaconic acid, graft copolymer with oxidized starch and other vinyl monomers 100-42-5DP, graft copolymer with oxidized starch and other vinyl monomers 2210-25-5DP, N-Isopropylacrylamide, graft copolymer with oxidized starch and other vinyl monomers 2421-44-5DP, 2-Dimethylaminoethyl methacrylate hydrochloride, graft copolymer with oxidized starch and other vinyl monomers 2680-03-7DP, graft copolymer with oxidized starch and other vinyl monomers 5039-78-1DP, graft copolymer with oxidized starch and other vinyl monomers 9005-25-8DP, Starch, oxidized, graft polymers with cationic vinyl monomers and other

comonomers, uses **13052-13-6DP**, 2-Hydroxy-3-acryloyloxypropyltrimethylammonium chloride, graft copolymer with oxidized starch and other vinyl monomers 15214-89-8DP, graft copolymer with oxidized starch and other vinyl monomers 44992-01-0DP, Acryloyloxyethyltrimethylammonium chloride, graft copolymer with oxidized starch and other vinyl monomers 51961-06-9DP, 2-Dimethylaminoethyl acrylate hydrochloride, graft copolymer with oxidized starch and other vinyl monomers 60162-20-1DP, graft copolymer with oxidized starch and other vinyl monomers **212563-89-8P**, 2-Hydroxy-3-acryloyloxypropyltrimethylammonium chloride-MS 3800 graft copolymer 212563-90-1P, Methacryloyloxyethyltrimethylammonium chloride-MS 3800 graft copolymer 212563-91-2P, Acryloyloxyethyltrimethylammonium chloride-MS 3800 graft copolymer 212563-92-3P, Dimethylaminoethyl methacrylate hydrochloride salt-MS 3800 graft copolymer 212563-93-4P, Dimethylaminoethyl acrylate hydrochloride salt-MS 3800 graft copolymer 212563-95-6P, Dimethylaminopropylacrylamide hydrochloride salt-MS 3800 graft copolymer 212563-96-7P, Acrylamide-acryloyloxyethyltrimethylammonium chloride-MS 3800 graft copolymer 212563-97-8P, Acryloyloxyethyltrimethylammonium chloride-N-isopropylacrylamide-MS 3800 graft copolymer 212563-98-9P, Acryloyloxyethyltrimethylammonium chloride-MS-3800-N-vinylpyrrolidone graft copolymer 212563-99-0P, Acryloyloxyethyltrimethylammonium chloride-dimethylacrylamide-MS 3800 graft copolymer 212564-01-7P, Acryloyloxyethyltrimethylammonium chloride-MS 3800-styrene graft copolymer 212564-02-8P, Acrylic acid-acryloyloxyethyltrimethylammonium chloride-MS 3800 graft copolymer 212564-03-9P 212564-04-0P, Acryloyloxyethyltrimethylammonium chloride-itaconic acid-MS 3800 graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-resistant coatings for **ink-jet** printing paper)

IT **13052-13-6DP**, 2-Hydroxy-3-acryloyloxypropyltrimethylammonium chloride, graft copolymer with oxidized starch and other vinyl monomers **212563-89-8P**, 2-Hydroxy-3-acryloyloxypropyltrimethylammonium chloride-MS 3800 graft copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-resistant coatings for **ink-jet** printing paper)

RN 13052-13-6 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(1-oxo-2-propenyl)oxy]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 212563-89-8 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with MS 3800, graft (9CI) (CA INDEX NAME)

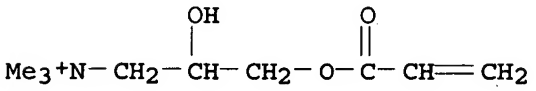
CM 1

CRN 66230-82-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 13052-13-6
CMF C9 H18 N O3 . Cl



L50 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:512495 HCAPLUS
DN 129:182124
TI Hydrophilic acrylic copolymer, its particles, and ink-jet printing medium using them
IN Sato, Masahiro; Yamagishi, Masayuki
PA Soken Kagaku K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10212323	A2	19980811	JP 1997-18135	19970131
	US 6063488	A	20000516	US 1998-124616	19980729
PRAI	JP 1997-18135	A	19970131		

AB The copolymer comprises a crosslinked acrylic copolymer consisting of (A) a repeating unit obtained from a N-containing acrylic monomer having ≥1 CH2:CR1CO (R1 = H, Me, Et) and ≥1 N+R23.X- (R2 = H, C1-5 alkyl, C1-5 alkylol; X = halo) and (B) a repeating unit obtained from an acrylic monomer CH2:CR3COQ (R3 = H, Me, Et; Q = NH2, NHR4OH; R4 = C1-5 alkylene; R5 = H, C1-20 alkoxy). The particles comprise the copolymer. The printing medium has an ink-receiving layer containing the particles. The polymer particles with good hydrophilic property and water resistance gives an ink-jet printing paper with improved ink-absorbing and antiblocking properties.
IC ICM C08F220-34
ICS B41M005-00; C08F220-36
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST hydrophilic acrylic polymer ink jet printing; water resistance acrylic acrylamide polymer hydrophilic; paper ink jet printing acrylic polymer
IT Ionomers
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(hydrophilic acrylic copolymer particles with good water resistance for ink-jet printing medium)

IT Ink-jet recording sheets
(paper; hydrophilic acrylic copolymer particles with good water resistance for ink-jet printing medium)

IT Paper
(printing, ink-jet; hydrophilic acrylic copolymer particles with good water resistance for ink-jet printing medium)

IT 35429-19-7P **90984-70-6P 211615-58-6P 211615-59-7P 211615-60-0P**
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(hydrophilic acrylic copolymer particles with good water resistance for **ink-jet** printing medium)

IT **211615-57-5P**
RL: PNU (Preparation, unclassified); **PREP (Preparation)**
(hydrophilic acrylic copolymer particles with good water resistance for **ink-jet** printing medium)

IT 79-10-7, 2-Propenoic acid, reactions 593-81-7, Trimethylamine hydrochloride 193065-95-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrophilic acrylic copolymer particles with good water resistance for ink-jet printing medium)

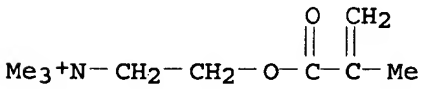
IT **90984-70-6P 211615-58-6P 211615-59-7P 211615-60-0P**
RL: DEV (Device component use); IMF (Industrial manufacture); **PREP (Preparation)**; USES (Uses)
(hydrophilic acrylic copolymer particles with good water resistance for **ink-jet** printing medium)

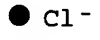
RN 90984-70-6 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N-(hydroxymethyl)-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

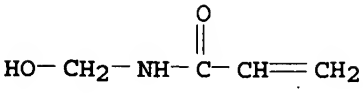
CRN 5039-78-1
CMF C9 H18 N O2 . Cl





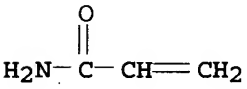
CM 2

CRN 924-42-5
CMF C4 H7 N O2



CM 3

CRN 79-06-1
CMF C3 H5 N O

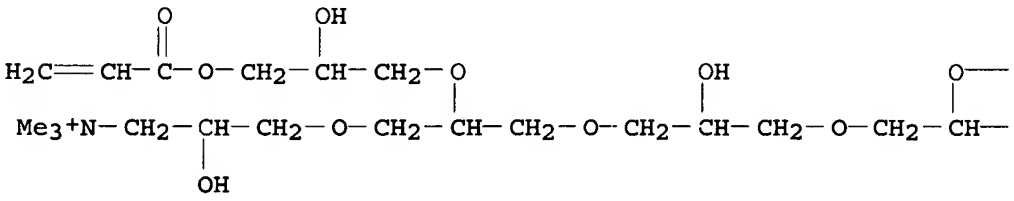


RN 211615-58-6 HCAPLUS
CN 4,8,12,16,20-Pentaoxatricosane-1,23-diaminium, 2,6,14,22-tetrahydroxy-10,18-bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]-N,N,N,N',N',N'-hexamethyl-, dichloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

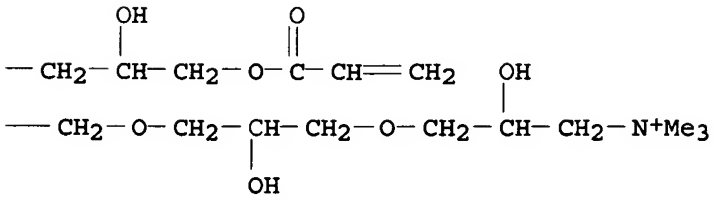
CM 1

CRN 211615-57-5
CMF C36 H70 N2 O17 . 2 Cl

PAGE 1-A

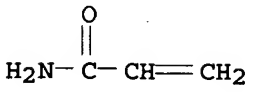


PAGE 1-B



CM 2

CRN 79-06-1
CMF C3 H5 N O

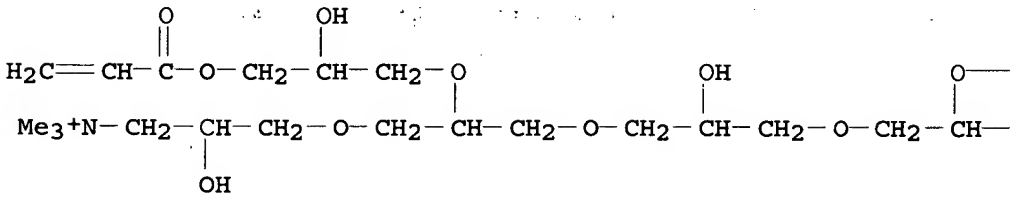


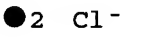
RN 211615-59-7 HCAPLUS
CN 4,8,12,16,20-Pentaoxatricosane-1,23-diaminium, 2,6,14,22-tetrahydroxy-10,18-bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]-N,N,N,N',N',N'-hexamethyl-, dichloride, polymer with N-(hydroxymethyl)-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

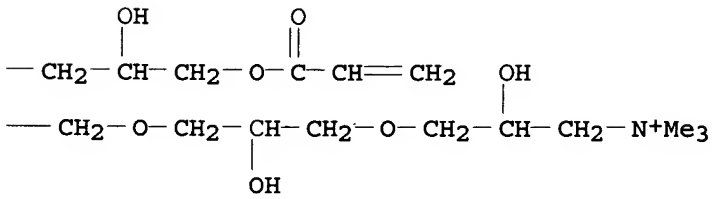
CRN 211615-57-5
CMF C36 H70 N2 O17 . 2 Cl

PAGE 1-A



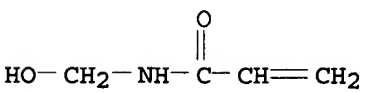


PAGE 1-B



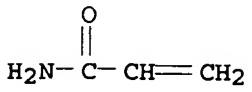
CM 2

CRN 924-42-5
CMF C4 H7 N O2



CM 3

CRN 79-06-1
CMF C3 H5 N O

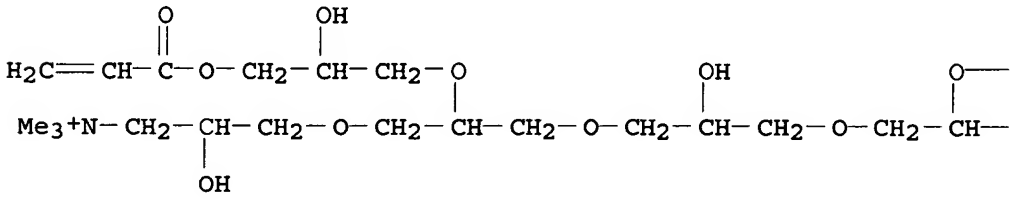


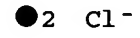
RN 211615-60-0 HCAPLUS
CN 4,8,12,16,20-Pentaoxatricosane-1,23-diaminium, 2,6,14,22-tetrahydroxy-10,18-bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]-N,N,N,N',N',N'-hexamethyl-, dichloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

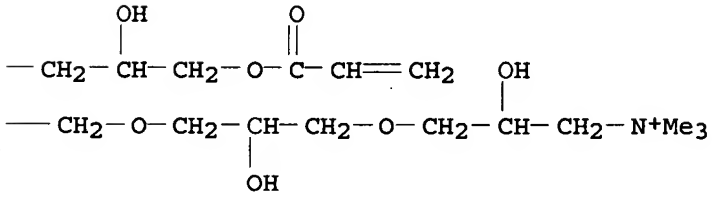
CRN 211615-57-5
CMF C36 H70 N2 O17 . 2 Cl

PAGE 1-A



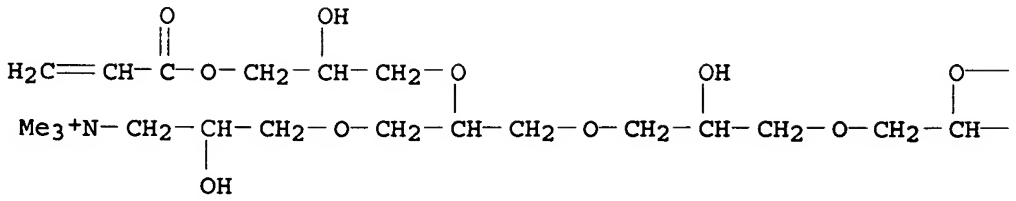


PAGE 1-B



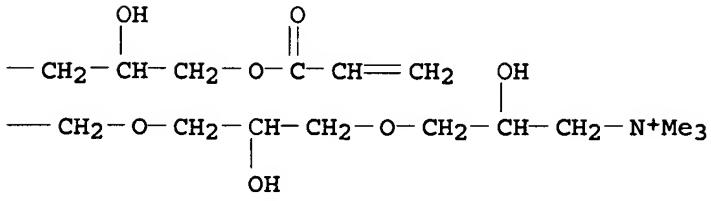
IT **211615-57-5P**
RL: PNU (Preparation, unclassified); **PREP (Preparation)**
(hydrophilic acrylic copolymer particles with good water resistance for **ink-jet** printing medium)
RN 211615-57-5 HCAPLUS
CN 4,8,12,16,20-Pentaoxatricosane-1,23-diaminium, 2,6,14,22-tetrahydroxy-10,18-bis[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]-N,N,N,N',N',N'-hexamethyl-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

PAGE 1-B



L50 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:479983 HCAPLUS
DN 129:168138
TI Ink-jet recording sheets and cationic copolymer aqueous compositions for them
IN Banto, Norimasa
PA Gantsu Kasei K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10195276	A2	19980728	JP 1997-3388	19970110
PRAI JP 1997-3388		19970110		

AB Title compns. are obtained by mixing 5-500 parts colloidal silica and 100 parts cationic copolymers manufactured by polymerization of (a) vinyl monomers, (b) 0.5-20% tertiary amino group-having vinyl monomers or their quaternary salts, and (C) 0.5-20% ethylenically unsatd. silane monomers in aqueous solvents in the presence or absence of emulsifiers or dispersants. Optionally, the compns. contain 100 parts pigments (average particle size 1-10 μm). Ink-jet-recording sheets having ink-receptor layer of the compns., are also claimed. Thus, Me methacrylate 30, Bu acrylate 60, Light Ester DM 5, and KBM 503 5 parts were polymerized in the presence of 2,2'-azobis(2-amidinopropane), stearyltrimethylammonium chloride, and polyoxyethylene nonylphenyl ether and adjusted to pH 5 to obtain a emulsion, 100 parts (as solid) of which was mixed with 100 parts (as solid) Snowtex AK to obtain a composition The composition was applied on paper to give recording sheets, which showed good ink absorption and provided

water-resistant images.

IC ICM C08L057-00
ICS D21H019-38; D21H019-44; D21H027-00; B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 43

ST ink jet recording sheet cationic polymer; acrylic cationic polymer ink receptor sheet

IT Polyelectrolytes
(cationic; ink-jet recording sheets having ink-receptor layers containing cationic acrylic copolymers)

IT Ink-jet recording sheets
(ink-jet recording sheets having ink-receptor layers containing cationic acrylic copolymers)

IT 134392-61-3P, Butyl acrylate-KBM 503-Light Ester DM-methyl methacrylate copolymer **211321-43-6P**, Blemmer QA-butyl acrylate-KBM 503-methyl methacrylate copolymer 211321-44-7P, Butyl acrylate-KBM 503-Light Ester DM-styrene copolymer 211321-45-8P, Ethyl acrylate-KBM 503-Light Ester DM-styrene graft copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording sheets having ink-receptor layers containing cationic acrylic copolymers)

IT 854021-65-1, Snowtex AK
RL: MOA (Modifier or additive use); USES (Uses)
(ink-jet recording sheets having ink-receptor layers containing cationic acrylic copolymers)

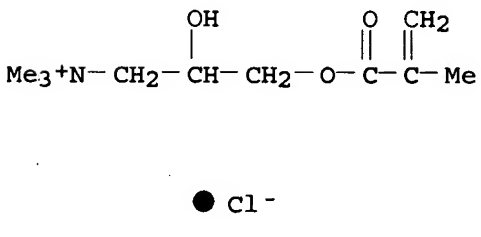
IT **211321-43-6P**, Blemmer QA-butyl acrylate-KBM 503-methyl methacrylate copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording sheets having ink-receptor layers containing cationic acrylic copolymers)

RN 211321-43-6 HCAPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

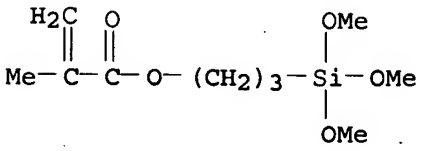
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



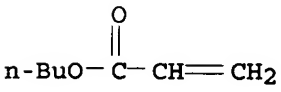
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



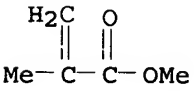
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:197803 HCAPLUS
DN 128:288350
TI Vinyl polymer composition for recording receptor material and the receptor material
IN Mitsubashi, Takashi; Hosoda, Atsushi; Iseki, Takayuki
PA Nitto Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10081062	A2	19980331	JP 1996-255322	19960906
PRAI JP 1996-255322		19960906		

AB The title composition comprises a copolymer made up of 5-40 % of hydrophobic vinyl monomers having a solubility in water of ≤10 g/100 g at 20°, 1-20% of cationic hydrophilic vinyl monomers , and 40-90% of nonionic hydrophilic vinyl monomers and an active energy ray-curable compound The material comprises a porous support coated with a layer formed by coating the compn, followed by irradiation with an active energy ray. The material suitable for use in ink-jet recording shows improved ink absorption and water resistance.

IC ICM B41M005-00
ICS B05D005-04; B05D007-04; C08J007-04; C09D005-00; D21H019-24; D21H027-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST vinyl polymer ink jet recording receptor; active ray curable polymer recording sheet
IT Polyurethanes, preparation
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(acrylic; ink-jet recording receptor sheet coated with vinyl polymer composition containing active energy ray-curable compound)
IT Ink-jet recording sheets
(ink-jet recording receptor sheet coated with vinyl polymer composition containing active energy ray-curable compound)
IT Polyurethanes, preparation
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(polyoxyalkylene-; ink-jet recording receptor sheet coated with vinyl polymer composition containing active energy ray-curable compound)
IT 205756-91-8P 205756-92-9P 205756-93-0P 205756-94-1P 205756-95-2P 205756-96-3P **205756-97-4P**
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording receptor sheet coated with vinyl polymer composition containing active energy ray-curable compound)
IT **205756-97-4P**
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording receptor sheet coated with vinyl polymer composition containing active energy ray-curable compound)
RN 205756-97-4 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and NK Oligo UA-W 1 (9CI) (CA INDEX NAME)

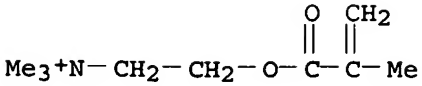
CM 1

CRN 202420-99-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

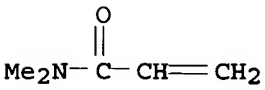
CM 2

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



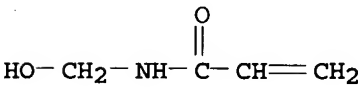
CM 3

CRN 2680-03-7
CMF C5 H9 N O



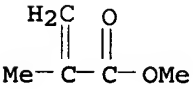
CM 4

CRN 924-42-5
CMF C4 H7 N O2



CM 5

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:543043 HCAPLUS
DN 127:249523
TI Cationic acrylic resin compositions for ink acceptors and recording materials using them
IN Noguchi, Hiromichi; Nishioka, Hiroko; Hikuma, Masahiko; Moriya, Kenichi; Katayama, Masato; Tochihara, Shinichi; Inamoto, Tadayoshi
PA Canon K. K., Japan; Canon Inc.
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09208853	A2	19970812	JP 1996-35768	19960131
	JP 3647125	B2	20050511		
PRAI	JP 1996-35768		19960131		

AB Title compns. contain Z1(OR1A)(OR2K)(OR3A)OR4X and/or Z2(OR5K)(OR6A)OR7A [Z1, Z2 = aliphatic polyhydric alc. residue, aliphatic group; R1-R7 = ethylene oxide chains; amount of the chains in R1-R4 is 9-50; amount of the chains in R5-R7 is 9-50; K = NMe3+, NEt3+, NMe(CH2CH2OH)2+, NH(CH2CH2O)2+, N(CH2CH2O)3+; K is associated with counter anion; A = CH2:CHCO2, CH2:CMeCO2; X = A, K] and water-insol. hydrophilic polymers containing acrylamide-type monomers 20-60, acrylate esters having ethylene glycol on the side chains 10-35, and alkyl acrylates 15-40%. The compns. are applied on substrates and polymerized to form solid coatings as ink acceptors. Ink jet printing acceptors having the above coatings of 5-50 μm thickness are also claimed. Thus, 80 parts HCl salt of poly(ethylene oxide) pentaerythritol ether tetraglycidyl ether diacrylate cationized by Me3N, 20 part-solids 50:35:15 N,N-dimethylaminoacrylamide-Blemmer PE 90 (polyethylene glycol monomethacrylate)-Me methacrylate copolymer solution, and 3.0 parts Irgacure 2959 (photopolymn. initiator) were mixed to give title composition, which was applied on a PET film, dried at 70° for 3 min, and UV-cured. Then, the film was impregnated with an aqueous solution of a jet printing ink for 60 s, washed by water, and dried to give a transparent dyed test piece showing no elution of the dye nor peeling off of the coating in further immersing in water.

IC ICM C09D004-06
ICS B05D005-04; B41M005-00; D06P005-00; D21H019-24; D21H027-00

CC 42-12 (Coatings, Inks, and Related Products)

ST cationic acrylic polymer printing ink acceptor; jet printing ink acceptor; water insol hydrophilic polymer ink acceptor

IT Polymer blends
RL: TEM (Technical or engineered material use); USES (Uses)
(jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT Inks
(jet-printing; jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT Polymerization catalysts
(photopolymn.; in jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT Quaternary ammonium compounds, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymers; in jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT Pigments, nonbiological
(white; in jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT 13463-67-7, Titanium oxide (TiO2), uses
RL: MOA (Modifier or additive use); USES (Uses)
(CR 50, white pigments; in jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT 75-50-3DP, Trimethylamine, reaction product with poly(ethylene oxide) pentaerythritol ether tetraglycidyl ether diacrylate 111-42-2DP, Diethanolamine, reaction product with poly(ethylene oxide) trimethylolpropane ether acrylate diglycidyl ether 3327-22-8DP,

3-Chloro-2-hydroxypropyltrimethylammonium chloride, reaction product with poly(ethylene oxide) glycerin ether diacrylate 195603-17-9DP, reaction products with trimethylamine, hydrochloric acid salt 195603-19-1DP, reaction products with 3-chloro-2-hydroxypropyltrimethylammonium chloride, lactate 195603-20-4DP, reaction product with diethanolamine, hydrochloric acid salt
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coatings; jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT 195373-83-2P 195373-84-3P **195373-85-4P 195603-22-6P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(hydrophilic; **jet** printing **ink**-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

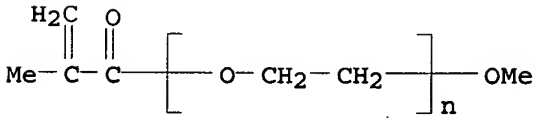
IT 947-19-3, Irgacure 184 106797-53-9, Irgacure 2959 189750-87-6, CGI 1700
RL: CAT (Catalyst use); USES (Uses)
(photopolymn. initiators; in jet printing ink-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

IT **195373-85-4P 195603-22-6P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(hydrophilic; **jet** printing **ink**-accepting coating layer containing cationic acrylic polymers and water-insol. hydrophilic acrylic polymers)

RN 195373-85-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

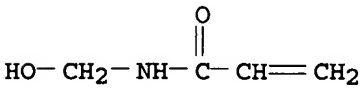
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 2

CRN 924-42-5
CMF C4 H7 N O2



SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09174998	A2	19970708	JP 1995-335291	19951222
PRAI JP 1995-335291		19951222		

AB The sheet comprises a support successively coated with 1st ink receiving layer containing a water-soluble electron beam-curable resin and 2nd layer containing (70-99):(30-1) weight parts organic pigment fine particles with average particle size ≤1 μm and a binder. The sheet shows good ink absorption and gives images with high brightness.

IC ICM B41M005-00
ICS B05D005-04; B05D007-24; B32B027-10; B32B027-16; B32B027-20; D21H019-80; D21H019-38
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST ink jet printing receptor pigment; electron beam curable resin printing receptor

IT Ink-jet printing
(receptors; ink-jet printing receptor with electron beam-curable resin layer and pigment-containing layer.)

IT 57636-10-9, Polyethylene glycol diacrylate homopolymer 115471-08-4, R 1130
RL: DEV (Device component use); USES (Uses)
(ink-jet printing receptor with electron beam-curable resin layer and pigment-containing layer.)

IT 53320-86-8, Laponite 188653-14-7, Snowtex ZL 854031-80-4, Snowtex 20
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(ink-jet printing receptor with electron beam-curable resin layer and pigment-containing layer.)

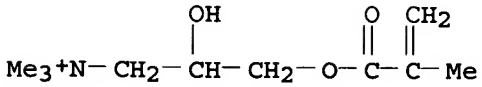
IT 107500-57-2P **193145-87-8P**, N,N-Dimethylaminoethyl acrylate; 2-hydroxy-3-methacryloxypropyl trimethylammonium chloride copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing receptor with electron beam-curable resin layer and pigment-containing layer.)

IT **193145-87-8P**, N,N-Dimethylaminoethyl acrylate; 2-hydroxy-3-methacryloxypropyl trimethylammonium chloride copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** printing receptor with electron beam-curable resin layer and pigment-containing layer.)

RN 193145-87-8 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-(dimethylamino)ethyl 2-propenoate (9CI) (CA INDEX NAME)

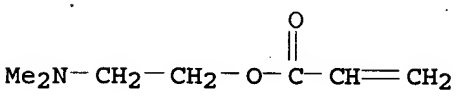
CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



CM 2

CRN 2439-35-2
CMF C7 H13 N O2



L50 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:402441 HCAPLUS
DN 127:35579
TI Water-resistant polymers for ink-jet printing materials with good ink absorption
IN Nagahara, Masaru; Mihashi, Takashi; Hosoda, Jun; Izeki, Takayuki
PA Nitto Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09110939	A2	19970428	JP 1995-295902	19951020
PRAI JP 1995-295902		19951020		

AB Title materials have coatings comprising polymers consisting of (A) hydrophobic vinyl monomers with solubility ≤10 g in 100-g 20°-H2O 20-60, (B) cationic hydrophilic vinyl monomers 1-30, and (C) nonionic hydrophilic vinyl monomers 10-80 weight%. Thus, Me methacrylate 40, methacryloyloxyethyltrimethylammoium chloride 10, and N-methylolacrylamide 50 parts were polymerized and applied on a polyester film to give a test piece showing good ink absorption and water resistance.

IC ICM C08F220-14
ICS B05D007-24; B41M005-00; C08F220-56; C08F226-10; C08J007-04
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 74
ST acrylic polymer ink jet printing waterproofing; ink absorbability acrylic polymer jet printing
IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymeric; water-resistant acrylic polymers for ink-jet printing materials with good ink absorbability)
IT Ink-jet printing
Water-resistant materials
(water-resistant acrylic polymers for ink-jet printing materials with good ink absorbability)

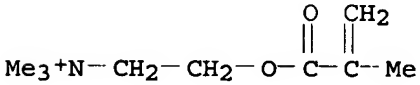
IT **190506-14-0P 190506-18-4P** 190506-21-9P
190506-24-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-resistant acrylic polymers for **ink-jet** printing materials with good ink absorbability)

IT **190506-14-0P 190506-18-4P 190506-24-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(water-resistant acrylic polymers for **ink-jet** printing materials with good ink absorbability)

RN 190506-14-0 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

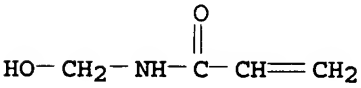
CM 1

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



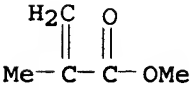
CM 2

CRN 924-42-5
CMF C4 H7 N O2



CM 3

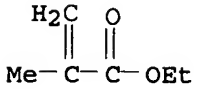
CRN 80-62-6
CMF C5 H8 O2



RN 190506-18-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, 2-hydroxypropanoate, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 3

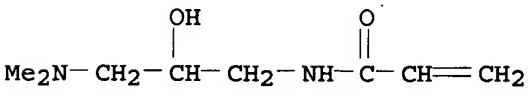
CRN 97-63-2
CMF C6 H10 O2



RN 195603-22-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with N-[3-(dimethylamino)-2-hydroxypropyl]-2-propenamide and 2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

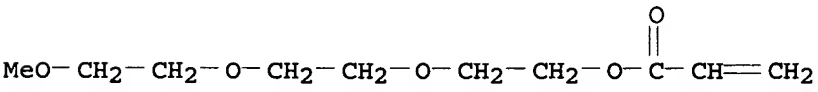
CM 1

CRN 195603-21-5
CMF C8 H16 N2 O2



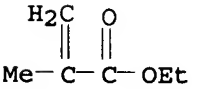
CM 2

CRN 48067-72-7
CMF C10 H18 O5



CM 3

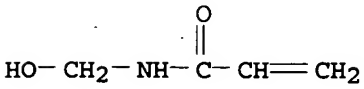
CRN 97-63-2
CMF C6 H10 O2



L50 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:475653 HCAPLUS
DN 127:169112
TI Ink-jet printing receptor sheet with good ink absorption
IN Nagasaki, Shinichi; Nemoto, Hiroyuki; Ikezawa, Hideo
PA Oji Paper Co., Ltd., Japan

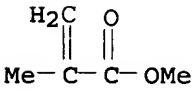
CM 1

CRN 924-42-5
CMF C4 H7 N O2



CM 2

CRN 80-62-6
CMF C5 H8 O2

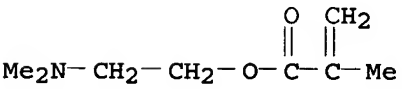


CM 3

CRN 80180-38-7
CMF C8 H15 N O2 . C3 H6 O3

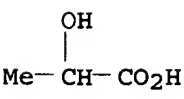
CM 4

CRN 2867-47-2
CMF C8 H15 N O2



CM 5

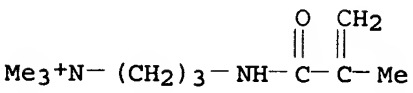
CRN 50-21-5
CMF C3 H6 O3



RN 190506-24-2 HCAPLUS
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N,N-dimethyl-2-propenamide, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

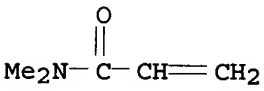
CM 1

CRN 51410-72-1
CMF C10 H21 N2 O . Cl



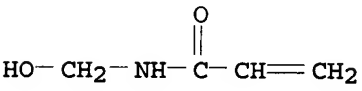
CM 2

CRN 2680-03-7
CMF C5 H9 N O



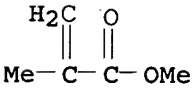
CM 3

CRN 924-42-5
CMF C4 H7 N O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:383582 HCAPLUS
DN 127:26192
TI Receptor material containing quaternary ammonium-containing polymer useful in ink jet recording
IN Makino, Shigeto; Mitsutake, Tatsuo
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09099632	A2	19970415	JP 1995-260062	19951006
PRAI JP 1995-260062		19951006		

AB The title material contains, at least on a substrate, a surfactant-free emulsion of a copolymer with glass transition temperature ≤20° comprising 15-50 weight% ≥1 monomer CH2:CR1COXCnH2nN+R2R3R4.Y- [R1 = H, Me; X = O, NH; R2, R3 = C1-4 alkyl; R4 = H, (substituted) C1-4 alkyl; n = 2-5; Y- = anion forming a salt] and 50-85 weight% ≥1 other copolymerizable vinyl monomer, which are dried after applying on the substrate. The material provides high d. images with improved water resistance by using aqueous inks.

IC ICM B41M005-00
ICS B41J002-01; C08J007-04; D21H019-20

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 43

ST ink jet printing receptor emulsion; quaternary ammonium substituted polymer emulsion; water thinned ink jet printing; surfactant free emulsion ink acceptor

IT Quaternary ammonium compounds, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymers, emulsion; water-thinned jet printing ink receptor containing quaternary ammonium-substituted polymer emulsion with water resistance)

IT Inks
(printing, water-thinned; water-thinned jet printing ink receptor containing quaternary ammonium-substituted polymer emulsion with water resistance)

IT Emulsions
Water-resistant materials
(water-thinned jet printing ink receptor containing quaternary ammonium-substituted polymer emulsion with water resistance)

IT **147212-15-5P 147232-97-1P**, Butyl acrylate-methacryloyloxyethyltrimethylammonium chloride-N-methylolacrylamide-styrene copolymer **147232-98-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(emulsion; water-thinned **jet** printing **ink** receptor containing quaternary ammonium-substituted polymer emulsion with water resistance)

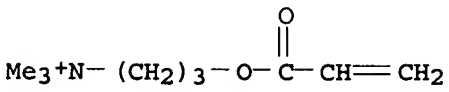
IT **147212-15-5P 147232-97-1P**, Butyl acrylate-methacryloyloxyethyltrimethylammonium chloride-N-methylolacrylamide-styrene copolymer **147232-98-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(emulsion; water-thinned **jet** printing **ink** receptor containing quaternary ammonium-substituted polymer emulsion with water resistance)

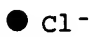
RN 147212-15-5 HCAPLUS
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 110083-73-3

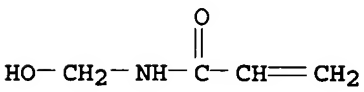
CMF C9 H18 N O2 . Cl





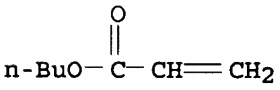
CM 2

CRN 924-42-5
CMF C4 H7 N O2



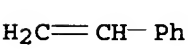
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

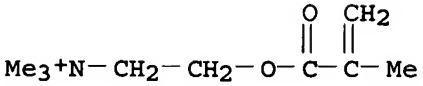
CRN 100-42-5
CMF C8 H8

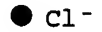


RN 147232-97-1 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

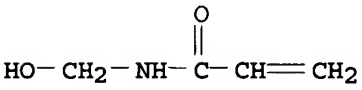
CRN 5039-78-1
CMF C9 H18 N O2 . Cl





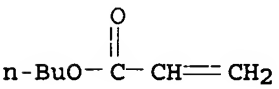
CM 2

CRN 924-42-5
CMF C4 H7 N O2



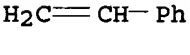
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

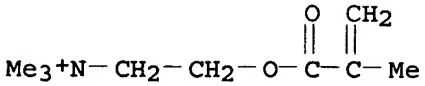
CRN 100-42-5
CMF C8 H8



RN 147232-98-2 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

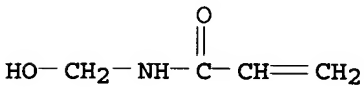
CM 1

CRN 5039-78-1
CMF C9 H18 N O2 . Cl



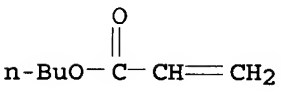
CM 2

CRN 924-42-5
CMF C4 H7 N O2



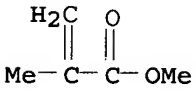
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:230756 HCAPLUS
DN 126:218704
TI Liquid crystal display color filter and its manufacture using ink-jet printing method
IN Shiba, Shoji; Kashiwazaki, Akio; Hirose, Masafumi; Shioda, Akinori
PA Canon Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09026508	A2	19970128	JP 1995-177461	19950713
PRAI	JP 1995-177461		19950713		

AB The process comprises the steps of (1) forming a resin composition layer on a substrate, (2) selectively modifying the resin composition layer to form 1st and 2nd areas, (3) coloring the 1st area by an ink-jet printing method, (4) hardening the resin composition layer, and (5) forming a light-blocking layer on the 2nd area. The steps (2) is carried out to change wettability and/or absorptivity of an ink-jet printing ink. The step (4) is carried out by applying heat or directing radiation. The process is designed to provide the color filter at low production cost and in a short time.

IC ICM G02B005-20
ICS G02B005-22; G02F001-1335

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST liq crystal display color filter manuf; ink jet printing LCD color filter

IT Ink-jet printing
Liquid crystal displays
Optical filters
(liquid crystal display color filter and its manufacture using ink-jet printing method)

IT Polysilanes
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(liquid crystal display color filter and its manufacture using ink-jet printing method)

IT 31324-77-3 76188-55-1, Methylphenylpolysilane
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(liquid crystal display color filter and its manufacture using ink-jet printing method)

IT **28502-06-9P**, Methyl methacrylate-N-methylolacrylamide copolymer **167860-30-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(liquid crystal display color filter and its manufacture using **ink-jet** printing method)

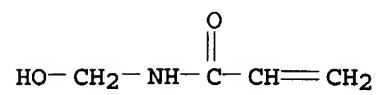
IT **28502-06-9P**, Methyl methacrylate-N-methylolacrylamide copolymer **167860-30-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(liquid crystal display color filter and its manufacture using **ink-jet** printing method)

RN 28502-06-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

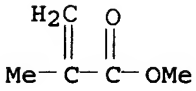
CM 1

CRN 924-42-5
CMF C4 H7 N O2



CM 2

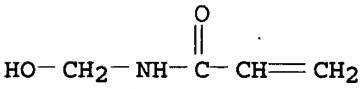
CRN 80-62-6
CMF C5 H8 O2



RN 167860-30-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

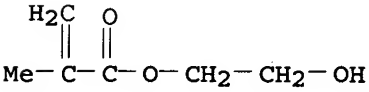
CM 1

CRN 924-42-5
CMF C4 H7 N O2



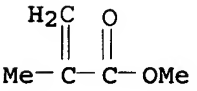
CM 2

CRN 868-77-9
CMF C6 H10 O3



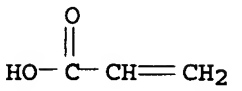
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2



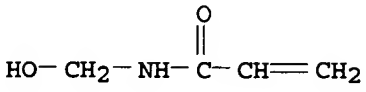
L50 ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:230755 HCAPLUS
DN 126:218703
TI Liquid crystal display color filter and its manufacture using ink-jet printing method
IN Suzuki, Hiroyuki
PA Canon Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09026506	A2	19970128	JP 1995-176229	19950712
PRAI	JP 1995-176229		19950712		

AB The process comprises applying an ink on a heat-hardenable ink-absorbing layer formed on a substrate by using a ink-jet printing method, drying under a pos. pressure, and hardening the ink-absorbing layer by appling heat. The process provided the color filter free of color mixing at low production cost.
IC ICM G02B005-20
ICS G02B005-22; G02F001-1335
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST liq crystal display color filter manuf; ink jet printing LCD color filter
IT Ink-jet printing
Liquid crystal displays
Optical filters
(liquid crystal display color filter and its manufacture using ink-jet printing method)
IT **160109-42-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(liquid crystal display color filter and its manufacture using **ink-jet** printing method)
IT **160109-42-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(liquid crystal display color filter and its manufacture using **ink-jet** printing method)
RN 160109-42-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

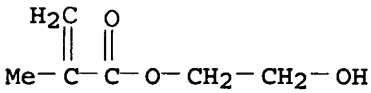
CM 1

CRN 924-42-5
CMF C4 H7 N O2



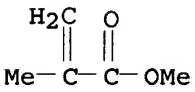
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:215500 HCAPLUS
DN 126:205568
TI Liquid crystal panel color filter and its manufacture
IN Kashiwazaki, Akio; Shiba, Shoji; Hirose, Masafumi; Shioda, Akinori
PA Canon Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09021911	A2	19970121	JP 1995-172110	19950707
PRAI	JP 1995-172110		19950707		

AB The process comprises coloring a resin composition layer having high ink-absorbing areas and low ink-absorbing areas by using an ink-jet printing method and then hardening the colored resin composition layer by directing light or applying heat when a height gap between the colored area and the non-colored area on the resin composition layer becomes ≤0.5 μm. The process is designed to give an LCD color filter which has smooth surface and is free of color mixing.

IC ICM G02B005-20
ICS G02F001-1335
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST liq crystal display color filter; ink jet printing color filter manuf
IT Ink-jet printing
Liquid crystal displays

Optical filters
(manufacture of liquid crystal panel color filter by using ink-jet printing)

IT Epoxy resins, preparation
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(manufacture of liquid crystal panel color filter by using ink-jet printing)

IT 24979-70-2P, Poly-p-hydroxystyrene **160109-42-2P**, 2-Hydroxyethyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(manufacture of liquid crystal panel color filter by using **ink-jet** printing)

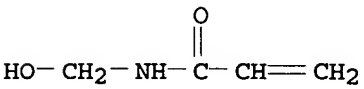
IT **160109-42-2P**, 2-Hydroxyethyl methacrylate-N-methylolacrylamide-methyl methacrylate copolymer
RL: DEV (Device component use); SPN (Synthetic preparation); **PREP (Preparation)**; USES (Uses)
(manufacture of liquid crystal panel color filter by using **ink-jet** printing)

RN 160109-42-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

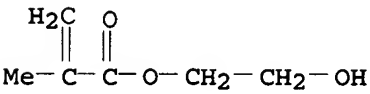
CM 1

CRN 924-42-5
CMF C4 H7 N O2



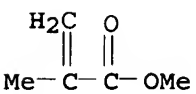
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 47 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:139698 HCAPLUS
DN 126:145456
TI Anticlogging jet-printing inks with good storage stability
IN Satake, Jun; Sawada, Seiji; Fujii, Masahiro; Iida, Yasuharu
PA Toyo Ink Mfg Co, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08325498	A2	19961210	JP 1995-136259	19950602
	JP 3191615	B2	20010723		
PRAI	JP 1995-136259		19950602		

AB The inks contain pigments and water dispersions of resin compns. obtained by emulsion polymerization of 100 parts mixts. containing anionic monomers 1-10, nonionic water-soluble monomers 0.5-5, and other monomers 85-98.5% in the presence of 0.1-10 parts anionic surfactants and 0.1-5 parts (as solid) colloidal SiO2. Thus, Me methacrylate 96, Bu methacrylate 100, itaconic acid 2, and N-methylolacrylamide 2 parts were polymerized at 55-56° in H2O in the presence of ammonium persulfate, NaHSO3, and 10 parts Ludox AM gave a 10%-solid composition, 10 parts of which was blended with an aqueous MA 7 (C black) dispersion 25, glycerin 10, Sodium Omadine 0.15, and H2O 54.85 parts to give a black ink.

IC ICM C09D011-00
ICS C09D011-02
CC 42-12 (Coatings, Inks, and Related Products)
ST anticlogging jet printing ink storage stability; acrylic polymer aq pigment dispersion ink; methacrylate polymer aq pigment dispersion ink; methylolacrylamide polymer aq pigment dispersion ink; silica colloidal aq dispersion ink; itaconic acid polymer pigment dispersion ink
IT Surfactants
(anionic; anticlogging jet-printing inks containing acrylic dispersants with good storage stability)
IT Surfactants
(anionic; in anticlogging jet-printing inks containing acrylic dispersants with good storage stability)
IT Inks
(jet-printing, anticlogging; anticlogging jet-printing inks containing acrylic dispersants with good storage stability)
IT 88684-52-0P, Acrylamide-acrylic acid-2-ethylhexyl acrylate-methyl methacrylate-styrene copolymer **186600-66-8P** 186600-68-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(anticlogging **jet**-printing **inks** with good storage stability)
IT 7631-86-9, Snowtex C, uses 59112-39-9, Ludox AM
RL: MOA (Modifier or additive use); USES (Uses)
(in anticlogging jet-printing inks containing acrylic dispersants with good storage stability)
IT 577-11-7, Sodium dioctylsulfosuccinate 2386-53-0, Sodium laurylsulfonate
RL: NUU (Other use, unclassified); USES (Uses)
(surfactant; in anticlogging jet-printing inks containing acrylic dispersants with good storage stability)
IT **186600-66-8P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

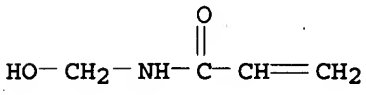
(anticlogging jet-printing inks with good storage stability)

RN 186600-66-8 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

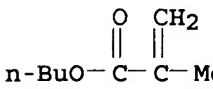
CM 1

CRN 924-42-5
CMF C4 H7 N O2



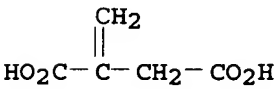
CM 2

CRN 97-88-1
CMF C8 H14 O2



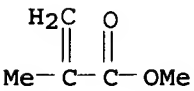
CM 3

CRN 97-65-4
CMF C5 H6 O4



CM 4

CRN 80-62-6
CMF C5 H8 O2



L50 ANSWER 48 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:721393 HCAPLUS
DN 126:39751
TI Transparent recording receptor containing cationic polymer
IN Nakano, Yukihiro; Myamoto, Katsushi

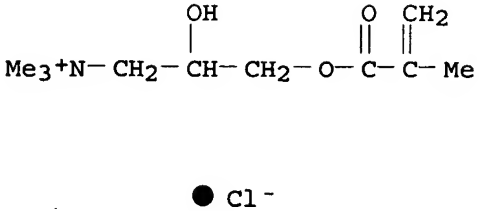
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08258403	A2	19961008	JP 1995-65971	19950324
PRAI JP 1995-65971		19950324		

AB The title film comprises a water-insol. transparent plastic film support coated successively with an ink-absorbing layer which may be made from poly(vinyl alc.), its derivative, poly(vinylpyrrolidone) or its derivative and a dye-fixing layer based on a cationic group-containing polymer. The film shows good printing properties and ink absorption, and hence it is suited for receptor in ink-jet recording and offset and flexog. printing. Thus, a PET substrate was coated with PVA 217 and with a composition containing poly(2-methacryloyloxyethyltrimethylammonium chloride) and silica sol to give a recording film.
IC ICM B41M005-00
ICS B32B027-08
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST ink jet recording receptor cationic polymer; dye fixing layer ink jet receptor
IT Ink-jet printing
(ink-jet recording receptor with cationic polymer dye-fixing layer)
IT 9003-39-8, K 30 130960-31-5, PVA 217
RL: DEV (Device component use); USES (Uses)
(ink-absorbing layer; ink-jet recording receptor with cationic polymer dye-fixing layer)
IT **25609-94-3P**, Poly(2-hydroxy-3-methacryloyloxypropyltrimethylammonium chloride) 26161-33-1P, Poly(2-methacryloyloxyethyltrimethylammonium chloride)
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording receptor with cationic polymer dye-fixing layer)
IT **25609-94-3P**, Poly(2-hydroxy-3-methacryloyloxypropyltrimethylammonium chloride)
RL: DEV (Device component use); PNU (Preparation, unclassified); **PREP (Preparation)**; USES (Uses)
(**ink-jet** recording receptor with cationic polymer dye-fixing layer)
RN 25609-94-3 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 13052-11-4
CMF C10 H20 N O3 . Cl



L50 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:411066 HCAPLUS
DN 115:11066
TI Jet-printing inks from acrylic polymer emulsions
IN Morita, Hiroshi; Nojiri, Norio; Ito, Tokuji
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03006270	A2	19910111	JP 1989-140102	19890531
PRAI	JP 1989-140102		19890531		

AB Inks contain crosslinked polymer latexes having average granular diams. <200 nm and NMR spin-lattice relaxation time (T1) ≤ 1.2 s. Thus, Et acrylate 75, Me methacrylate 75, N-methylolacrylamide 4.5, and water 1.5 parts were mixed, added (15 parts) to 100 parts water containing ammonium stearyl 2-hydroxy-3-allyloxy-1-propyl sulfosuccinate 4, 99.5:0.5 Na xylenesulfonate-Na alkylbenzenesulfonate mixture 2, and poly(oxyethylene) p,p'-isopropylidenebisphenyl ether dimethacrylate 2 parts, emulsified 13 min at 40°, heated to 60°, mixed with 48.5 parts water containing 2,2'-azobis(N,N'-dimethyleneisobutylamidine)-HCl, mixed with the remaining unsatd. monomer during 30 min, and aged 60 min to prepare a polymer latex having granular diameter 41 nm and T1 0.66 s.

IC ICM C09D011-00
ICS C09D011-02
CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
ST jet printing ink polymer latex; acrylic latex jet printing ink; acrylate copolymer latex printing ink; methacrylate copolymer latex printing ink; methylolacrylamide copolymer latex printing ink; emulsifier acrylic latex printing ink; polyoxyethylene bisphenol diacrylate copolymer ink; hydroxyallyloxypropyl sulfosuccinate emulsifier acrylic polymer; xylenesulfonate emulsifier acrylic polymer ink; alkylbenzenesulfonate emulsifier acrylic polymer ink
IT Emulsifying agents
(anionic, for manufacture of acrylic polymers in water for jet-printing inks)
IT Polymerization
(emulsion, of Et acrylate and methylolacrylamide and Et methacrylate, in presence of unsatd. emulsifiers)
IT Inks
(jet-printing, Et acrylate-methylolacrylamide-Me methacrylate copolymer emulsions for)
IT Emulsifying agents
(nonionic, for manufacture of acrylic polymers in water for jet-printing

inks)

IT 98-11-3D, Benzenesulfonic acid, alkyl derivs., sodium salts 1300-72-7, Sodium xylenesulfonate 25852-47-5, Polyethylene glycol dimethacrylate 41637-38-1 83868-76-2 84069-98-7 93610-24-3 118145-47-4 118200-88-7 118200-89-8 118216-85-6 118216-88-9 119574-30-0 119588-64-6 119618-51-8 122985-55-1 129162-76-1 130093-73-1 134092-51-6
RL: USES (Uses)
(emulsifiers, for manufacture of acrylic polymers in water for jet-printing inks)

IT **129159-60-0P** 129159-65-5P 129162-77-2P 129215-05-0P 129215-07-2P 134176-31-1P 134490-20-3P 134490-21-4P
RL: **PREP (Preparation)**
(manufacture of crosslinked, as aqueous emulsions, for **jet**-printing **inks**)

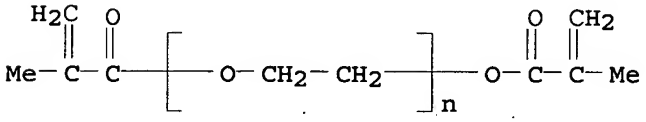
IT **129159-60-0P**
RL: **PREP (Preparation)**
(manufacture of crosslinked, as aqueous emulsions, for **jet**-printing **inks**)

RN 129159-60-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

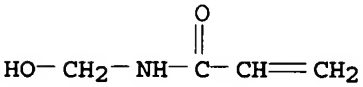
CM 1

CRN 25852-47-5
CMF (C2 H4 O)n C8 H10 O3
CCI PMS



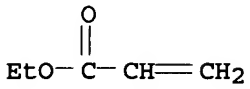
CM 2

CRN 924-42-5
CMF C4 H7 N O2



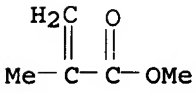
CM 3

CRN 140-88-5
CMF C5 H8 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



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